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**An Exploration of Students Learning  
Journey Experiences. Do They  
Illustrate Personal Characteristics  
That Influence Progression Through  
Their Physiotherapy Degree  
Programme?**

T M Wynter

DPT

June 2017

# **An Exploration of Students Learning Journey Experiences. Do They Illustrate Personal Characteristics That Influence Progression Through Their Physiotherapy Degree Programme?**

**TREVOR MARK WYNTER**

A thesis submitted in partial fulfilment of the requirements of the University of Northumbria at Newcastle for the degree of Professional Doctorate

Research undertaken in the Faculty of Health and Life Sciences, Department of Sport, Exercise and Rehabilitation

June 2017

## ABSTRACT

**BACKGROUND TO THE STUDY:** Recruitment is key for any organisation. Admission onto health education programmes must balance the requirements of a degree with preparation for a specific professional role. Additionally, gate keeping demands recruitment of those with potential to uphold the values and standards of the NHS constitution, the chosen profession, who can work with, and for, vulnerable people. Evidence indicates a relationship between prior academic attainment and future academic performance. However, the importance of personal characteristics for those entering healthcare education is unclear.

**RESEARCH QUESTION:** Do students learning journey experiences illustrate personal characteristics influencing progression through their physiotherapy degree?

**STUDY AIM:** To investigate a physiotherapy year groups journey through their degree programme, from pre-admission to graduation and identify personal characteristics influencing progression, professional registration and employability.

**METHODOLOGY:** A qualitative approach, built on a thematic model of personal, social and professional identity, utilised an applied social policy research data handling and analysis Framework approach, underpinned by a pragmatic worldview.

**METHOD:** Following ethical clearance, a physiotherapy cohort from a North East of England university consented to admissions and progression data being analysed. A purposive sample of nine students consented to attend semi-structured interviews exploring their learning journey. Interviews explored pre-admission through year 1, year 2 to year 3 and year 3 plus overview of their degree. Progression was analysed by consideration of secondary data, including grade point average (GPA), placement formative feedback & degree classification.

**RESULTS:** Analysis of the interviews and secondary data suggested all learning journeys present challenges. Six personal characteristics emerged as important facilitators, conscientiousness, resilience, reflection, caring, interpersonal relationships and attitude to learning. The strength of affinity for the intended physiotherapy identity emerged as a key motivating factor along the learning journey.

**CONCLUSION:** Learning journeys are challenging. Frustrations and disappointments transpire as a natural consequence of academic and professional development. They may also coincide with major life-events creating additional stressors. Personal characteristics appear vital protectors against such stressors and additionally facilitate the learning journey. No single key characteristic emerged; rather several appear to interact to facilitate the learning journey. When one characteristic is overwhelmed, successful individuals draw on others as resources. Characteristics themselves are not simple expressions of behaviour but nuanced, with certain facets more or less important depending on context. It is too simplistic to view struggling, or failing students as lacking certain characteristics, as unique contextual issues may inhibit utility of a normally present characteristic. Managing challenges appears related to the strength of affinity for the physiotherapy identity. If strong, individuals appear highly motivated to persevere even in the face of significant stressors. When weak or the proto-physiotherapy identity fails to match the reality encountered through the degree, the ability to manage is diminished, resulting in a challenged and likely unsuccessful outcome.

**ACADEMIC CONTRIBUTION:** The results have led to better understandings of the role of personal characteristics in the development of students through their professional education. It is envisaged this will not only contribute to more focused admissions strategy and processes locally, but will contribute knowledge to the national debate on values based recruitment (VBR) in the NHS.

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### **The Participants**

This study would not have been possible without the willing participation of the physiotherapy students who consented to be part of my learning journey. Thank you for the goodwill and the time given to me. I also thank you for your openness throughout the three phases of interviews it was very much appreciated.

## **Declaration**

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Ethical clearance for the research presented in this thesis has been approved. Approval was sought and granted by Northumbria University, Faculty of Health and Life Sciences Research Ethics Review Panel on 12<sup>th</sup> November 2013.

**I declare that the Word Count of this Thesis is 60334**

**Name: Trevor Mark Wynter**

**Signature:**

**Date:**

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## ABBREVIATIONS/ACRONYMS

<b>AHP</b>	Allied Health Professional – group of health professions that make up the wider health care team other than doctors and nurses – comprising Occupational Therapy (OTs), Paramedics, Physiotherapy (PT), Radiography, Speech and Language Therapy (SaLT).
<b>CSP</b>	Chartered Society of Physiotherapy (Professional body with Royal Charter – professional development responsibilities and acts as trade union)
<b>DH</b>	Department of Health
<b>EOF</b>	Education Outcomes Framework (sets the outcomes the Secretary of State for Health expects from the reformed education and training system)
<b>HCPC</b>	Health and Care Professions Council (Prior to August 2012 known as <b>HCP</b> - Health Professions Council – regulatory and state registration body for professions allied to medicine, usually termed AHP's)
<b>HE</b>	Higher education
<b>HEE</b>	Health Education England (took responsibility for Government mandate for education and training of health and social care workforce from SHA in 2013)
<b>HEI</b>	Higher education institution
<b>HENE</b>	Health Education North East (local representative of <b>HEE</b> )  (Prior to 2013 role was performed by <b>SHA</b> - Strategic Health Authority)
<b>HPAT</b>	Health Professions Admission Test
<b>HSC</b>	Health and social care
<b>HSCP</b>	Health and social care profession
<b>HSCEP</b>	Health and social care education programme
<b>LETBs</b>	Local Education and Training Boards (Local HEE representatives and local health and social care employers)
<b>NHS</b>	National Health Service
<b>NMC</b>	Nursing and Midwifery Council (regulatory and registration body)
<b>PT</b>	Physiotherapy - “an autonomous applied science-based healthcare profession using professional knowledge and practical skills together with thinking skills and skills for interaction to work with people to identify and maximise their functional/movement potential”
<b>QAA</b>	Quality Assurance Agency (Independent organisation working with a Government mandate to oversee and review ‘quality’ of higher education provision throughout the sector)
<b>SHA</b>	Strategic Health Authority (responsibility for Government mandate for education and training of health and social care workforce until 2013)
<b>UKCAT</b>	United Kingdom Clinical Aptitude Test

## **PREFACE TO THE STUDY**

The original idea for this study was conceived as an investigation of an aspect my post as senior lecturer in physiotherapy education and more specifically, my role as Admissions Tutor. This role was constantly evolving due to the requirements of various bodies such as the Health and Care Professions Council (HCPC), the Chartered Society of Physiotherapy (CSP), the Quality Assurance Agency (QAA); and in response to Government backed reports such as the Schwartz (2004) recommendations for fair entry into higher education. More recently, the Department of Health's (2013) mandate to Health Education England (HEE). This was to ensure quality and prevent service failings through recruitment and development based on values and behaviours. This mandate and the Francis Report (2013) that prompted it, has raised questions about what precisely should health and social care professions be looking for in the applicants to education, training and clinical posts? The values and behaviours alluded to are those identified in the NHS Constitution and are: 'working together for patients'; 'respect and dignity'; 'commitment to quality of care'; 'compassion'; 'improving lives'; and 'everyone counts' (HEE, 2014). However, the generalised nature of these values does not easily facilitate recruitment; but rather suggests further investigation is required to highlight more specific and desirable individual characteristics that support the unique work of a given profession whilst aligning with the NHS constitution values.

### **Research Question**

Do students learning journey experiences illustrate personal characteristics that influence progression through their physiotherapy degree programme?

### **Structure of Thesis**

Chapter 1 explores the issue of recruitment to health and social care education programmes to set-the-scene with respect to the role of the admissions tutor. It goes on to consider the concept of fitness-to-practice and associated concepts such as professionalism related to the physiotherapy profession. This is to aid understanding of the expectations for specific personal characteristics for those registered as physiotherapists. Thus, there is a brief exploration of some of the key values and behaviours physiotherapy recruitment should be considering. The

chapter concludes by exploring theories of personal, social and professional identity as a theoretical framework for the thesis. How individuals become attracted to certain professions and how the strength of that attachment may dictate or influence their pursuit of it as a future career is considered.

Chapter 2 presents the research question, aims and objectives for the study. It discusses the importance of the literature review in presenting a contextual background for the study and the establishment of *a priori* ideas and themes. Methodological considerations are presented framing this study as a practical, applied exploration of a contextual issue, underpinned by a pragmatic approach. Pragmatism is presented as most appropriate in gaining understanding by investigating the practical consequences of the researched proposition. The proposition is that students, in recounting how they managed the various challenges encountered on their learning journey experiences, illustrate personal characteristics. Further, that these characteristics may be implicated as positively or negatively influential, on that journey. This pragmatic standpoint is highly relevant to the aims of professional doctorate study and its role as a research apprenticeship. The qualitative method utilised to undertake the study is explained and justified. The Framework approach to data handling, and data management, first developed within applied social policy research, relates well to the applied nature of this study and its use justified. Further, Framework's transparent stepped structure makes it a valuable development tool to inexperienced researchers. Development being facilitated by an experienced supervisor. The chapter concludes with a detailed exploration of ethical issues to underpin the importance of ethical research as the foundation of good quality research.

Chapter 3 presents the results of the data collection and management process and the abstraction and interpretation of that data. Secondary progression data is presented to represent the relative smoothness or challenge of each participants learning journey. This is followed by the presentation of each interview phase of the study. A clear breakdown of the Framework approach introduces each phase and culminates with the interpretations from each phase. The key points arising from each phase is illustrated by the inclusion of primary data extracts from the interviews.

Chapter 4 discusses the study findings with reference to the evidence-base. The apparent importance of professional identity and the interconnected relationship

with personality, values and learning power theories to the development and maturation of personal characteristics is explored. A learning journey explanatory model and a dynamic interactive systems model are postulated to explain the emergence of personal characteristics. Each of the identified characteristics are discussed with respect to the potential impact on the learning journey and the acquisition of a professional identity. The chapter concludes with a summary of the discussion, and includes consideration of the strengths and limitations and impact of the study. Finally, consideration is given to whether the study achieved the intended aim and objectives.

Appendices are included to provide supporting material to the thesis. These include a glossary of terms; the participant information and informed consent process; the secondary data collection format; the pictorial time-line diagram used to facilitate participants' discussions of their experiences through each phase of the study. A table of definitions related to the concept of fitness-to-practice is included to underpin the diverse, explicit and implicit, expectations on health and social care professionals and the challenges for recruitment. A copy of an adapted Rapid Identification of Themes from Audio recordings (RITA) form is included. A table of definitions, as used in this study, of the emergent personal characteristics is also included. Examples of data extracts are presented, focusing only on the emergent personal characteristics from each of the three phases. This is intended to demonstrate transparency within the abstraction and interpretation phases. Definitions of the key theories relating to personality, values and learning power and presented in table format. The appendices concludes with three personal reflections and a dissemination plan. The first is on the decision to undertake the professional doctorate, the second relates to my development as a qualitative researcher. The final reflection relates to my (the researchers) learning journey. The reflections are presented as integral to one of the intended purposes of undertaking the study, namely the exploration of the researchers own development through this research apprenticeship.

## **CHAPTER ONE: HEALTHCARE PROFESSIONAL FITNESS-TO-PRACTICE, PERSONAL TO PROFESSIONAL IDENTITY**

### **1.1: Introduction**

This study developed gradually as an aspect of the natural evolution of the admissions tutor role and development of the admissions strategy for the physiotherapy programmes at Northumbria University. Over the intervening years, Health and Social Care Education Programme (HSCEP) recruitment has seen much evolution. This was from Schwartz (2004) *'Fair admissions to higher education: recommendations for good practice'*; through the Quality Assurance Agency's (QAA) (2006) *Code of practice for the assurance of academic quality and standards in higher education*; to the Health and Care Professions Council's (HCPC) (2009) *'Standards of education and training'*.

In addition, there are both explicit and implicit expectations from a range of stakeholders. The higher education institution (HEI) have their business and market position to consider and of course their reputation as a quality educational institution to uphold. Health Education North East (HENE) agrees a contract for health education with the HEI based on workforce planning and has certain expectations of quality and value for money. The professional bodies (HCPC & Chartered Society of Physiotherapy (CSP)) expect education programmes to uphold professional standards and to be first-line gatekeepers to the profession. Clinical partners provide students with clinical practice experience and through their relationship with their local HEI often have an active role in the recruitment process. Service users have a stake in the quality of health services and are often represented at HEI/Faculty/Department, or Programme level in an advisory capacity. The admissions tutor represents the interests of the HEI, profession and their colleagues. They are tasked with meeting contracted target numbers, designing, managing and being accountable for the local admission process. Finally, the applicants themselves have aspirations and expectations that the 'process' will deal with them fairly. Recruitment to HSCEP's then is complex and multifaceted.

Successful recruitment is crucial to organisational performance ensuring the right people are enrolled to fulfil the aims and objectives of any given organisation or service (Chartered Institute of Personnel and Development (CIPD), 2012). In the



United Kingdom (UK) “access to higher education is a question of basic social justice” (Department for Business Innovation & Skills (DBIS), 2009, p. 4) with admissions processes designed to match the abilities and aptitudes of applicants and the demands of each programme against transparent and justifiable criteria (Schwartz, 2004). Some authors (Naylor, Norris & Williams, 2014; Mason & Sparkes, 2002a; Green & Waterfield, 1997) however, have contradicted this assertion, identifying education as a paradox, in both eliminating and perpetuating inequality, prominently amongst communities where notable inequalities of wealth and power exist.

The widening participation agenda had its origins in the 1980’s with successive governments advocating it as a means of balancing social inequality through personal and professional development in preparation for employment and contribution to a ‘better society’ (Naylor, Norris & Williams, 2014; Mason & Sparkes, 2002a). However, although there has been some broadening of the admissions profiles into professions like physiotherapy there remains under-representation from lower socioeconomic backgrounds, ethnic groups, those with disabilities and mature students (Mason & Sparkes, 2002a). Indeed, Mason and Sparkes (2002b, p. 280) identified applications to physiotherapy constituted 87.2 percent white and 6.4 percent black, with offers and acceptance at 92 percent white and 3.7 percent black, suggesting an unacceptable bias in favour of white applicants. Naylor, Norris and Williams (2014) identified physiotherapy students from ethnic backgrounds were awarded lower clinical placement marks than their white counterparts (Mason & Sparkes, 2002a; Green & Waterfield, 1997). The irony of this situation is these socio-economic communities tend also to be the areas of greatest health and social care need and it is reasonable to imply the lack of diversity in the HSC professional workforce could present barriers to effective clinical practice and overall seamless service provision (Naylor, Norris & Williams, 2014; Green & Waterfield, 1997).

HSCP recruitment must be alert to such issues of inequity and adhere to the QAA’s ‘Code of practice for the assurance of academic quality and standards in higher education’ (2006, p7): the ‘Physiotherapy Admissions Strategy’ strives to implement an admissions policy and process that is *“fair, clear and explicit and ... implemented consistently”*. This can be challenging, given that admissions policies and processes are subject to multiple influences from the Government,

regulatory and professional bodies and other local stakeholders (Bithell, 2007; Green & Waterfield, 1997). However, the ultimate purpose is to identify students, regardless of status and background, with the 'potential' to achieve the graduate attributes expected by the HEI and develop into autonomous practitioners, with the eligibility to be conferred a 'licence to practice', who will ultimately provide a high standard of care to their service users (Edgar, Mercer & Hamer, 2014; Green & Waterfield, 1997).

HSCEP's have a particular responsibility in the HE sector, of admitting students who will uphold the professional and ethical standards of practice of their chosen profession (Lysaght, Donnelly & Villeneuve, 2009). Therefore, these programme providers take on not only the educational role, but vitally, a gate-keeping role for the profession they represent (Bradley, 2013; Unsworth, 2011; Ryan, McCormack & Cleak, 2006; Miller & Koerin, 1998; Lefrance, Gray & Herbert, 2004) with the intention of promoting the values of that specific profession and safeguarding service-users. Recruiters must ensure selection onto HSCEP's identifies those with a genuine vocation for the work of that profession and so getting-it-right is an educational, moral and ethical requirement (Bradley, 2013).

Quality health and social care (HSC) professional education begins with the admissions process (Hepler & Noble Jr., 1990), screening out the unsuitable and selecting those deemed to have the potential to succeed academically and develop into competent, effective and ethical practitioners, fit-for-purpose. Access to higher education (HE) is largely based on the previous academic performance of the applicant. Current literature suggests both prior academic performance and personal characteristics (values, behaviours and skills) have an important role in HSCEP recruitment (Edgar, Mercer & Hamer, 2014; Lysaght, Donnelly & Villeneuve, 2009; Utzman, Riddle & Jewell, 2007; Andrews *et al.*, 2006; Parry *et al.*, 2006; Ryan McCormack & Cleak, 2006; Guffey, *et al.*, 2002; Mason & Sparkes, 2002b; Mason & Sparkes, 2002c; Morris & Farmer, 1998; Green & Waterfield, 1997). However, the precise education performance predictive value of such academic and personal data, particularly with respect to clinical practice performance is not well understood. In this study the various performance criteria, academic, practical and professional are considered with respect to the extent students experience a smooth or challenged learning journey. This is judged by self-report from their personal experiences and programme progression data.

Aptitude tests such as the Health Professions Admission Test (HPAT) and the UK Clinical Aptitude Test (UKCAT) remain unproven as predictors of performance; and their “*fairness and validity*” have been questioned (Yates & James, 2013, p. 1; Halpenny *et al.*, 2010). Personal characteristics have recognised face validity, relating to the extent to which they reflect the studied phenomenon, in this case a successful learning journey. They have been viewed as desirable components of recruitment to HSCEP’s (Edgar, Mercer & Hamer, 2014; Parry *et al.*, 2006; Ryan McCormack & Cleak, 2006; Guffey, *et al.*, 2002). Morris and Farmer (1998) are particularly critical of over reliance on selection via previous academic attainment alone. They suggested such admissions criteria are both inadequate and of questionable value. They concluded, although academic ability has clear merit, selection is complicated by oversubscription to a limited number of places by similarly qualified applicants and therefore attention must fall on the personal characteristics required by the competent clinician. Although broad agreement exists, that selection be based on more than academic criteria alone, specifically which personal criteria and how they are evaluated is hugely debateable (Edgar, Mercer & Hamer, 2014; Gottlieb & Rogers, 2002).

With respect to HSCEP entry, it should be noted that previous academic attainment has been demonstrated, in the UK and the USA, to be a predictor of future academic performance (Lysaght, Donnelly & Villeneuve, 2009; Utzman, Riddle & Jewell, 2007; Andrews *et al.*, 2006; Ryan McCormack & Cleak, 2006; Parry *et al.*, 2006; Guffey, *et al.*, 2002). In the UK, academic criteria encompasses both compulsory education and post-16 education performance. Although it is important to note this view of academic criteria is not universally accepted. Gottlieb and Rogers (2002) state there is an increasing body of evidence that traditional academic criteria may not be as effective in predicting academic success in all students. This, it is suggested, may be due to changing curricular of pre-university education or related to widening participation issues, but no firm conclusions are drawn.

Green and Waterfield (1997) state there is no link between academic performance and job performance. They suggest questions around fitness for purpose cannot be answered by the academic profile alone. Mason and Sparkes (2002a) take this further by claiming that HSCEP entry, based on prior academic performance alone, is an elitist strategy stifling diversity within the health care professions and

perpetuating higher educational inequalities. The debate around the value of academic criteria in recruitment as a predictor of performance is a complex one. In the case of admissions to HSC professions, the link between academic criteria as a predictor of developing clinical skills and post graduate professional performance is even less clear (Parry *et al.*, 2006; Guffey *et al.*, 2002). This represents a significant gap in current evidence-base that will not be addressed in this thesis. A particularly significant gap in knowledge, however, exists around the importance of personal characteristics as indicators of performance and professional suitability. This will be the key focus of this thesis.

Although not a general requirement throughout the HE sector, most HSCEP admissions usually have some requirements for personal characteristics criteria. This is based on the belief they are important in clinical skills and professional development (Edgar, Mercer & Hamer, 2014; Gottlieb & Rogers, 2002; Guffey *et al.*, 2002). The fact personal characteristics criteria vary between institutions, programmes and professions indicate they have not been explored to the same extent as academic entry criteria. Although a range of personal characteristics have been identified as desirable for those seeking admission to HSCEP's, which are most valuable and why is not well understood. These characteristics are myriad in their diversity, ranging from personal attributes, including empathy and conscientiousness; through values and behaviours, such as, cultural and diversity sensitivity and ethical behaviour, to specific skills, such as interpersonal competence, communication skills and team working. Occasionally, they include complex, or multifactorial concepts, such as professionalism or fitness-for-purpose (Boak, Mitchell & Moore, 2012; HPC, 2011a; HPC, 2011b; Unsworth, 2011). The evidence-base provides no consensus on the specific personal characteristics that should be included in admissions processes. There is little understanding of the extent to which they can predict future academic, clinical practice and professional performance. Neither is there a consensus on how they should be assessed (Prideaux, *et al.*, 2011; Roberts, *et al.*, 2007; Parry *et al.*, 2006; Ryan, McCormack & Cleak, 2006; Guffey *et al.*, 2002).

The evidence-base itself appears to be dominated by studies measuring prior academic performance and personal characteristics against future academic performance. This is judged by grade point average (GPA), degree classification, or attrition (Lysaght, Donnelly & Villeneuve, 2009; Utzman, Riddle & Jewell, 2007;

Andrews *et al.*, 2006; Ryan McCormack & Cleak, 2006; Parry *et al.*, 2006; Guffey, *et al.*, 2002). However, the uncertainty, particularly with respect to personal characteristics, suggests a need to explore these ill-defined and poorly understood phenomena. Qualitative approaches should be considered, possibly, as a forerunner to quantitative enquiry, as they may identify, more clearly, the variables involved (Ritchie *et al.*, 2014, p. 37). Qualitative enquiry offers the best option to enhance understanding of which personal characteristics are most influential on HSC professional development. For example, students perspectives on the level of personal preparedness for their degree and future professional role, is poorly understood and yet deserves a voice. Student experiences on their learning journey towards their chosen profession may illuminate personal characteristics. These may be explored in relation to the success, or progression through the degree. However, such exploration may indicate the need for better, more focused support from the HEI to facilitate progression. Deeper insights may highlight which of the criteria used to recruit the students are most or least valuable as indicators of successful progression. This in turn could aid development of recruitment processes. This limitation in the evidence-base suggests the need for more expansive investigation and supports the intention of this study.

The ethics of making judgements on individuals' suitability for any given HSCEP is highly questionable. This is particularly true when there is such a lack of consensus about which criteria are more valuable and predictive of academic and clinical progression. The uncertainty, demonstrated within the available evidence, points towards a need for more complete investigation of the topic. Therefore, the focus of this thesis will be to gain a better understanding of personal characteristics as illuminated through exploration of physiotherapy student's experiences on the journey through their degree programme. Through analysis of these experiences, the intention is to conceptualise the personal characteristics illustrated, identify if they are common to all participants; and identify their impact on progression along the learning journey towards professional registration.

For those working in HSCEP's or recruiting for the health services the personal criterion debate took on a new imperative in 2013. The publication of the long awaited Francis Report (2013) identified serious failings of health services at the Mid Staffordshire NHS Foundation Trust. The recommendations from this report

and the subsequent Department of Health (2013) mandate to HEE was to prevent any recurrence of the identified service failings. This was to be achieved by delivering high quality care through recruitment and development of the workforce with *“the right skills and the right values”* (Department of Health (DH) 2013, p. 1). Explicitly, *“...recruitment and selection for training programmes [will be] based on values and behaviours as well as technical and academic skills”* (DH, 2013, p. 13). The values and behaviours alluded to are those identified in the NHS Constitution and are: ‘working together for patients’; ‘respect and dignity’; ‘commitment to quality of care’; ‘compassion’; ‘improving lives’; and ‘everyone counts’ (Health Education England (HEE) 2014, p. 18).

In their evaluation of values based recruitment, the Work Psychology Group and HEE acknowledge the complex relationship between values and attributes. This included relationships such as ability and personality, and the inherent challenges in assessing and measuring values for recruitment. Additionally, they recognised the limited evidence base relating to VBR (Work Psychology Group, 2014, p.3). Therefore, despite apparent greater clarity on what personal criteria HSCEP’s should be recruiting for, namely NHS constitution values, the debate around what precisely is desirable and how to identify them is evolving and clearly justifies further research. When investigating values, attributes and resultant behaviours consistent with fitness-to-practice a HSC profession it is essential to understand what fitness-to-practice actually means to the specific profession. This understanding provides a potential foundation for identifying the expectations for an individual entering that profession. Thus, it offers a point of comparison between the professions expectations and the individual’s personal characteristics. Additionally, consideration of individuals’ identities offers a useful theoretical framework for understanding the development of personal characteristics and the attraction to a specific profession through the emergence of a professional identity.

## **1.2: Understanding ‘fitness-to-practice’**

The importance of understanding personal characteristics has been a crucial aspect of organisational and professional recruitment for many years. This is particularly so with respect to the HSCP’s as evidenced by the variety of such professions addressed by the literature and discussed in the introduction to the thesis. The allied concept of fitness-to-practice would appear then to be relatively straightforward; particularly in the light shed by the Francis report (2013) into the

serious failings of health care at the Mid Staffordshire NHS Foundation Trust. These failings resulted in appalling suffering of many patients and unacceptably high mortality rates. The report findings (Francis, 2013, p.67) extols the importance of the common values enshrined in the NHS Constitution and unambiguously states they must be fundamental standards shared and applied by all healthcare workers. Similarly, in the summary of recommendations (Francis, 2013, p. 85-91) many concern the adoption of a shared culture, a common set of core values and standards with the NHS Constitution as the reference point. However, it also noted a need to revise the constitution to include explicit reference to the NHS values and to include the NHS Constitution into all professional and managerial codes.

In response to Francis (2013) the Government, through the Department of Health (DH, 2014) established an Education Outcomes Framework (EOF). This set out the expectations for the reforms to the education, training and workforce development system. In addition, the DH (2013) abolished the Strategic Health Authorities and transferred their responsibilities for education and training to Health Education England (HEE) and employers, working together in Local Education and Training Boards (LETBs). Therefore, HEE are to provide the leadership for the reformed education system, whilst the objectives are set out in the EOF. The HEE mandate matches five domains or high-level national indicators of the EOF; 'excellent education'; 'competent and capable staff'; 'flexible workforce receptive to research and innovation'; 'NHS values and behaviours'; and 'widening participation' (DH, 2013, p. 6; DH, 2014, p. 6). This aligned approach aimed to ensure education, training and development of the existing and future healthcare workforce contributes positively to improvements in the health services. However, the EOF report (DH, 2014, p. 5) acknowledged the indicators or outcomes are not well developed, and the evidence for cause and effect is complex. The various metrics identified are a starting platform, from which further research will facilitate the development of more specific indicators. It is envisaged this thesis will conceptualise personal characteristics with respect to physiotherapy and their role in health education progression and preparation for a career as a physiotherapist.

The available literature concerning fitness-to-practice is both considerable (see Appendix 5 for a summary review of the literature) and confusing. It is also heavily

biased towards medicine and social work, with apparently less attention to the allied health professions such as physiotherapy (Boak, Mitchell & Moore, 2012, p. 6). Exploration of the literature identifies a range of terms and concepts that are, if not interchangeable, closely related. These included concepts of professionalism, professional suitability, professional competence, fitness-for-purpose, and good character (Bradley, 2013, p. 200; Boak, Mitchell & Moore, 2012, p. 10; Aguilar, Stupans & Scutter, 2011, p. 2; McLachlan, 2010, p. 37; Miller & Koerin, 1998, p. 437). The only consensus seemed to be that professionalism is a hugely complex construct, with multiple and varied components (HPC, 2011a, p. 13). Some exploration of this material seemed pertinent to this thesis. This is based on the close relationship between notions of professionalism, values and behaviours. Further, it is related to the attraction to, and eventual emergence of, a professional identity.

There are numerous disputes about the concept of fitness-to-practice. Professions are knowledge-based occupations, which normally follow a specific period of education. This includes, specialist vocational training and focused experience under the control of experts. They additionally have shared common characteristics (Evetts, 2013, p. 781; Svensson, 2006, p.580; Evetts, 2003, p. 397; Morris, 2002, p. 354). Professionalism is viewed, by some, as a value system and a form of community morality through which community service or altruism is emphasised (Evetts, 2003, p. 399). It has also been considered an ideology formulated around professional associations. Professionalism is therefore associated with establishing a set of characteristic work practices. These are designed to, on one level ensure quality, and on another level protect the market monopoly for the specific professional expertise (Evetts, 2003, p. 402; Morris, 2002, p. 354). Some consider that professions combine these two standpoints of ideology and work practices, in a “*normative value system*” (Evetts, 2013, 780; Evetts, 2003 p. 403). Such a value system contributes to preservation of the market position of the profession through regulation of the licence to practice. It also, through the expectation for recognisable professional characteristics, forms a subtle, yet distinctive form of occupational and possibly social control (Evetts, 2013, p. 785). Therefore, moral obligations of belonging to a profession creates an environment for mutual societal and professional benefit. They may also be associated with the underpinning appeal for many individuals towards a specific



professional identity, particularly around notions of altruistic service and autonomy (Evetts, 2013, p. 786).

The concept of collegial work practices, customary amongst many professions, is a collaborative approach to utilising expert knowledge to achieve mutually acceptable solutions to problems. Such solutions should work in the best interests of the service-user and the practitioner. However, many professions own descriptors include such terms as 'distinctive professional knowledge', 'unique skill-set' and espouse the exclusivity of the licence to practice. This may suggest encampment and barriers to entry for many 'outsiders'. The attraction to 'insiders' and prospective insiders illustrates the establishment of a 'professional society' which encompasses professional identity (Morris, 2002, p. 354). The exclusivity of the specific professional monopoly is, arguably, acceptable if the core reason for it is quality of the public service. Therefore, interwoven is a notion of trust in the service-user/practitioner relationship. Here, autonomous status, indeed the legitimacy of the profession is dependent on the demonstration of social value. Society's gift of professional freedom is granted because professional interests are sub-ordinate to those of the service-user, demonstrated through practitioner responsibility and accountability (Swick, 2000, p. 613).

A growing reality of fiscal restraint has emerged over recent years in the aftermath of the global economic crises (The Economist, 2013) and has now become an aspect of professional identity. Free-market economies, such as here in the UK have in part laid some of the blame on the rising costs of welfare, social and health services on this economic crisis (Evetts, 2013). The response has been cost-cutting measures and the advancement of accountancy lead managerial cultures throughout the public service sector. The result of this is the Government essentially redefining fitness-to-practice. This now includes being fiscally aware, with a greater budgetary focus, more commercially aware, more accountable and performance driven and increasingly more bureaucratised (Evetts, 2013; Waring & Currie, 2009; Svensson, 2006; Evetts, 2003).

Within this brave-new-world, working in the best interests of the service-user means working within tight financial constraints. This is often with a much-reduced workforce and with an expanded role for individuals. To compensate staff may be more highly trained, as can be seen by the emergence of specialist-practitioners. However, they may also be more constrained and less autonomous due to

working to externally (usually politically) determined indicators or measures. Such an environment threatens professionalism and has a potential negative impact on professional identity. There is a potential for conflict as the balance between the values driven fitness-to-practice professionalism ('from within') and ideological control of professionalism ('from above') has shifted (Evetts, 2013, p. 786; Evetts, 2003, p. 409).

The challenges to professional autonomy from market forces are complex. Organisations (including the Government) emphasise the value of autonomous professionals whilst socialising those professionals into fiscally aware organisational cultures, values and greater bureaucratisation (Evetts, 2013; Waring & Currie, 2009; Svensson, 2006). Market forces based on external drivers like value-for-money and customer satisfaction further challenge autonomy. Additionally, notions of the expert client/consumer further challenge the established service-user/practitioner relationship. Service-users armed with web-obtained knowledge and a greater awareness of their rights are empowered to question the professional judgement and make choices for themselves (Evetts, 2013; Waring & Currie, 2009; Svensson, 2006).

There is potential for conflict in such a rapidly changing environment. Mueller *et al.* (2008) investigating nursing professionals working in call centres identified their professional identity was threatened by management demands for increased productivity (more calls answered and shorter call times). However, if fitness-to-practice requires change and if there is a willingness for the professions to accommodate the demands 'from above' then the normative values 'from within' can be retained without loss of professional identity (Evetts, 2013, 786; Waring & Currie, 2009; Evetts, 2003, p. 409; Swick, 2000, p. 614). Waring and Currie (2009) suggests best practice allows customisation and localisation to address the dynamic context specificity of clinical practice and organisational requirement. This adds a further incentive to understand the characteristics deemed most important to professional identity. Gaining greater understanding of the specific professional expectations for new members will facilitate appreciation of how personal characteristics contribute to fulfilment of professional aspirations (goals). It will also illustrate the extent to which individuals' uphold and therefore perpetuate the integrity of their profession (values and behaviours) and fulfil the required social responsibilities so vital to public trust.

One of the most fundamental issues in relation to fitness-to-practice and professional regulation is the growing concern for public safety. A number of high profile critical incidents has stimulated this. These include, the public inquiries into the failings of the children's' cardiac services at Bristol Royal Infirmary, 1984-1995; the death of Victoria Climbié, 2000; and more recently Mid-Staffordshire, 2005-2009. Each have, to varying degrees, identified education and training required reform to promote patient/client centred collaborative working to safeguard service users (DH, 2001a; DH, 2003; Adams *et al.*, 2006; Francis, 2013). Further, there are claims that later career disciplinary proceedings are more likely amongst those *"associated with similar concerns"* during their professional education (HPC, 2011a, p. 5; Boak, Mitchell & Moore, 2012, p. 13; Unsworth, 2011, p. 467). Although caution should be exercised due to the limited sensitivity of such data. The majority of students with negative comments in their records never go onto to a disciplinary hearing in their later career (Unsworth, 2011, p. 467). However, the implication is, if shortcomings in professionalism are identified at the student stage, remedial action may be possible through focused education or expulsion from the profession before harm can occur. Clearly understanding characteristics that may lead to disciplinary actions, or fall short of professional expectations and could negatively influence ongoing careers is hugely desirable. However, such specific student disciplinary investigations was not a key focus of this thesis. Such activity is left to the disciplinary or professional suitability boards within universities.

### **1.2.1: The concept of professionalism and to fitness-to-practice.**

The HPC (2011) commissioned a study to investigate understanding of professionalism in three of the professions they regulate (chiropodists/podiatrists, occupational therapists and paramedics), including students and academics. The results identified that there was no one, universally accepted, definition of professionalism. Perceptions of professionalism included 'professionalism as a holistic construct', encompassing everything a HSC professional does. Professionalism was also considered as good clinical care and good practice linked to personal awareness of the scope of practice, knowledge of personal limitations of propositional and non-propositional knowledge, and acting appropriately. Professionalism was also considered an expression of self, with actions being an expression of innate, intrinsic qualities or values. Further, it was

also described in terms of attitudes and behaviours. These included an attitude to learn and question, an attitude to the job and to colleagues, such as respect. Behaviours included being polite, trustworthy and honest, being personable, calm and confident and treating people as individuals. Finally, appearance was considered important for public perception, including cleanliness, neatness, general appearance and presentation. The report rejected the idea of professionalism as a collection of “*discrete skills*” (HPC, 2011a, p. 38). It concluded it should be viewed as a meta-skill founded on situational awareness and contextual judgement. The professional being able to draw on a range of propositional (academic and theoretical underpinning) knowledge and non-propositional (craft and interpersonal) knowledge and skills appropriate to the context of the clinical interaction (HPC, 2011a, p.40).

Boak, Mitchell and Moore (2012) carried out an independent literature review, commissioned by the HPC as part of a review and consultation exercise into student registration. Amongst the medical professional literature reviewed, professionalism was the most frequently used term to describe fitness-to-practice. Of several definitions considered, six domains emerged as most useful in identifying professionalism; ethical practice, reflection and self-awareness, responsibility for actions, respect for patients, teamwork and social responsibility. Boak, Mitchell and Moore (2012, p.11) identified “*practical wisdom*” as a defining characteristic of professionalism; but stated its acquisition was “*only after a prolonged period of experience and learning*” (Boak, Mitchell & Moore, 2012, p.11). Almost universally, a lack of professionalism was related to poor clinical practice. In relation to this thesis, indicators of the potential emergence of practical wisdom will be explored from clinical educator feedback.

With respect to physiotherapy a seven factor model of professional behaviour was identified in Boak, Mitchell and Moore (2012, p.12). The behaviours identified were; professionalism; critical thinking; professional development; communication management; personal balance; interpersonal skills and working relationships. Interestingly, the ‘professionalism factor’ comprised over thirty behaviours, but included, commitment to service; adherence to ethical standards; humanistic values such as integrity, honesty, respect for others, compassion and altruism; responsibility and accountability; and commitment to professional advancement. It is clear that such an apparently simple word, ‘professionalism’ encompasses a

huge breadth of ideas and concepts that challenge notions of simple assessment and monitoring.

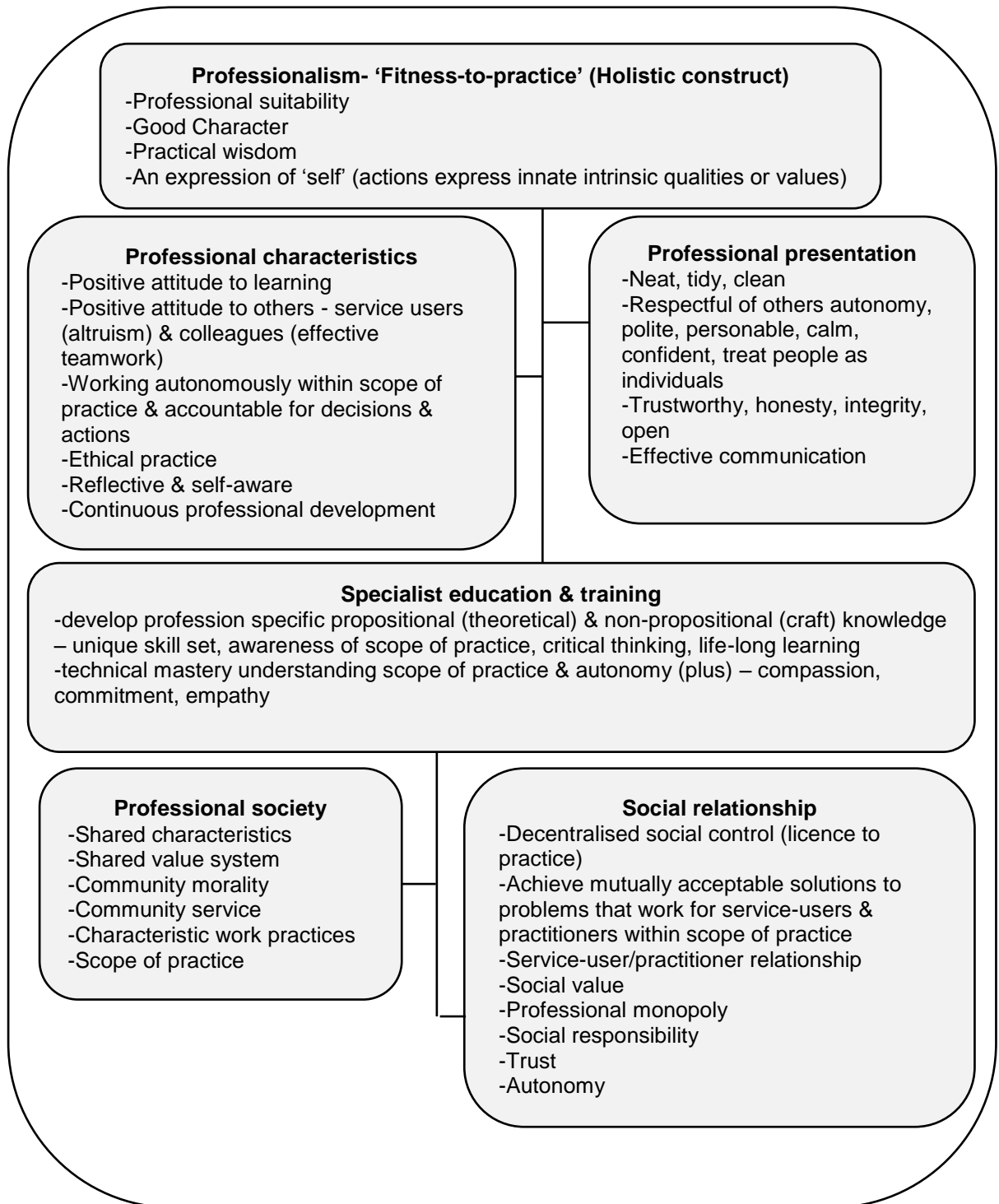
Currer (2009, in Boak, Mitchell & Moore, 2012, p. 14) states professional suitability *“is undefined and...undefinable”*. The concept is more often related to notions of unsuitability. However, it is important that judgements on suitability or unsuitability be based on individual cases and contexts (Boak, Mitchell & Moore, 2012, p. 14). Although, Miller and Koerin (1998, p. 448) raise the dilemma created by the gatekeeping/selection role of recruitment on to HSCEP's. They cite professional non-judgemental practice, a normally desirable characteristic, inhibiting recruiter's ability to identify unsuitability. The implication is screening out individuals' based on unsuitability is counter to the professional philosophy of being non-judgemental. Doing so rejects the ethical belief that all individuals have the capacity to change. Mezirow (2000, in Bradley, 2013, p. 201) appears to back this latter belief with their assertion of the power of education to transform individuals. However, the apparent dichotomy is rather ingenuous. HSC professional activity is defined by ethical (benevolent, doing good and non-maleficent, doing no harm) clinical decision-making. Professional judgement is constantly exercised and weeding out those falling short of professional expectations, even in the potential terms of an applicant to a HSCEP is paramount (Taylor, 2000, p. 257). This is particularly vital in maintaining the profession/society relationship of trust. However, to safeguard applicants each university is governed by QAA and professional body requirements. Therefore, admissions strategies must be fair and equitable to all applicants, but must address issues of unsuitability through legal checks of convictions and personal health investigations prior commencement of studies. These aspects of professionalism are outside the intention of this thesis.

Figure 1.1 summarises the key features of fitness-to-practice/professionalism. It identifies key considerations when developing recruitment strategies and designing curricula. Therefore, it also identifies the complex expectations of those seeking to enter the profession. It is important to acknowledge that students are in a *“process of developing their knowledge and skills to practice safely and effectively”* (Boak, Mitchell & Moore, 2012, p.4). Existing registrants fitness-to-practice is defined by their *“having the skills, knowledge, health and character... to practice their profession safely and effectively”* (Boak, Mitchell & Moore, 2012, p.4). Such an acknowledgement is consistent with a concept of potential.

Students are in a stage of development and therefore it is unreasonable to expect fully formed professional characteristics until completion of professional education. For some, not even then, as it is the “*patient miles*”, or consolidation of practice learning that denotes the true professional (Richardson, 1999b, p. 469).

The fitness-to-practice/professionalism construct is holistic. It incorporates ideas of ‘professional suitability’, including ‘good character’, ‘practical wisdom’ and represents an expression of ‘self’ (or the inter-relationship of individuals’ actions as an expression of innate intrinsic characteristics). The broader concept has its foundations in the social relationship between the profession and its place in the wider society in which it operates. Its members, aspiring members and the wider society by its unique professional society of shared values, characteristics and work practices understand it. The professions specialist education and training helps aspiring members attain the expected professional characteristics. Finally, professional presentation represents how the profession wishes to be perceived by others, or its outward face.

**Figure 1.1: Features of fitness-to-practice/professionalism**



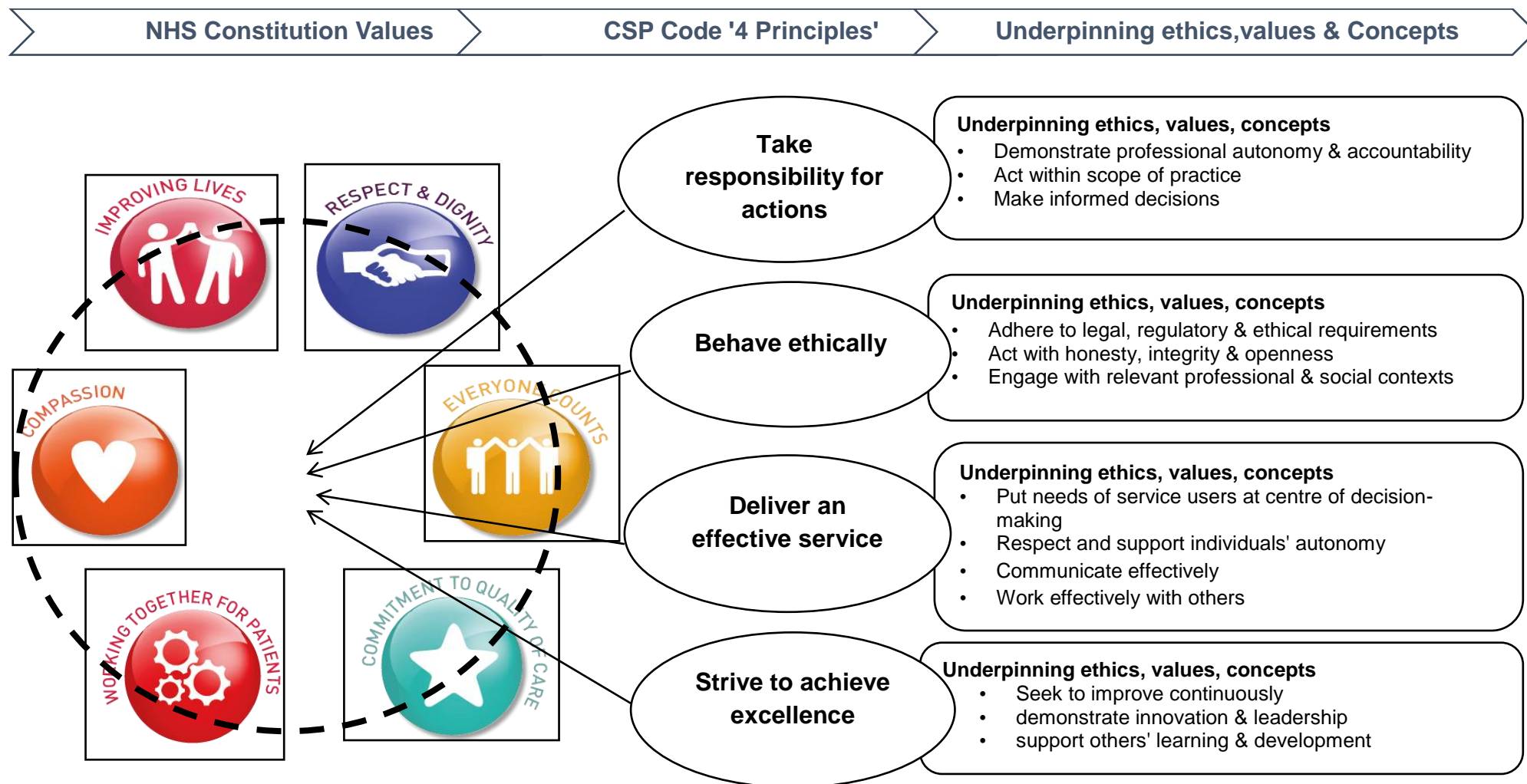
Whilst Figure 1.1 provides an overview of the concept of fitness-for-practice/professionalism it lacks the specificity required to understand those characteristics that are the expectations of physiotherapy students. The CSP (2011) produced a Code of members' professional values and behaviour that sets out the professional bodies expectations of all its members. This is summarised in Figure 1.2 and presented in relation to the NHS Constitution Values, which have

become the broader expectations for HSC professionals in the UK. It illustrates how the four key principles: *“take responsibility for their actions”*; *“behave ethically”*; *“deliver an effective service”*; and *“strive to achieve excellence”* encapsulate physiotherapy values and behaviours (CSP, 2011, p. 5). These principles reflect the purpose and context of physiotherapy activity as defined by the professional body. The principles themselves are underpinned by ethics, values and concepts, with a select representation presented in the figure.

Comparing Figures 1.1 and 1.2 illustrates how the two constructs inter-relate. For example, taking responsibility for actions is underpinned by demonstrating professional autonomy and accountability within an individual’s scope of practice (Figure 1.2). This then relates to the notion of specialist education and training in which the student professional not only develops the unique knowledge and skill set of that profession, but also begins to understand scope of practice and the meaning of autonomy. This understanding becomes an aspect of the professional characteristics illustrated in Figure 1.1. Behaving ethically (Figure 1.2) is facilitated by working within the bounds of the law of the land, regulatory, for example HCPC (2016) standards; and the ethical standards of the profession, for example the CSP (2011) code. This aspect relates to the idea of the professional society; the social relationship and professional characteristics illustrated in Figure 1.1, the expectation for integrity, honesty and openness and engaging with professional and social contexts, relates strongly with professional presentation. Delivering an effective service (Figure 1.2) enshrines the professional characteristics of altruism and teamwork and respect for others autonomy (patients and colleagues) and clear effective communication with all, inherent in professional presentation illustrated in Figure 1.1. Finally, striving to achieve excellence (Figure 1.2) is about a commitment to continuous learning and development. Once again, this relates to the professional characteristics in Figure 1.1, and early engagement with life-long learning practices through the professions specialist education and training. Figures 1.1 and 1.2 therefore represent the professional identity the participants of this study were striving to achieve.



Figure 1.2: The CSP Professional 'Values and behaviours' (CSP, 2011) mapped against the NHS Constitution Values



A distinction must be made between the finished and registered professional and the applicant or student in a state of development. The transformative role of the learning journey is the means of realising the student's potential. Equally, it can identify those who simply do not demonstrate the potential to develop in to a registerable professional. Recruitment onto HSCEP's must be sufficiently robust to identify those with a detailed appreciation of and attraction to the professional identity. It also must be able to identify those who display the potential characteristics required to facilitate a learning journey through to registration and into a professional career. This highlights the current dilemma and challenge for admissions tutors and those recruiting HSC professionals, namely what to assess. Should the focus be on structural competencies such as values or attributes, or process competencies such as behaviours (Aguilar, Stupans & Scutter, 2011, p. 2)? The CSP (2011) code (Figure 1.2) provides a slightly clearer indication, albeit broad and complex, of the characteristics and criteria to identify during the recruitment process. Yet there remains an obvious requirement for a more explicit conceptualisation of the personal characteristics most desirable for successful assimilation into the profession. This then is the focus of this study.

### **1.3: Theoretical Framework - Personal, social, organisational and professional identity.**

In order to make recruitment judgements about the potential professional suitability of applicants to a HSCP based in part on personal characteristics, it is desirable to have an appreciation of how these characteristics develop and manifest within individuals. What individuals say and do can provide a window into that persons thought processes and the values they hold. This in turn allows the experienced recruiter the opportunity to compare these individual characteristics with the ethics, values and concepts held by the profession for which they are recruiting. The previous section identified the broad construct of professionalism or fitness-to-practice (Figure 1.1) and, more specifically, identified some of the principles of physiotherapy professional practice (Figure 1.2), thus identifying the key points of comparison recruitment must make against the individual's personal characteristics through the admissions processes. The current section considers the development of these characteristics and considers their role in an individual's cognitive processing, development of personal values and expressed behaviours. The concept of 'identity' offers a valuable theoretical framework to take forward

into the study, particularly into the analysis and interpretation phase of the research and beyond onto recommendations for future practice of the admissions tutors professional role.

### **1.3.1: Personal and social identity**

The arena of personal characteristics is a complex one, which appears enmeshed in sociological notions of 'identity' (Jenkins, 2008). Identity has been described as personal (individual), social (group/community) which may include social categories, loose associations and/or intimacy groups; and organisational or professional (task or institutional) group (Roccas & Brewer, 2002, p. 89). It is possible to simplify the concepts by considering personal identity as, knowing who we are. Social identity is a little more complex encompassing, us knowing whom others are, they knowing who we are and us knowing who they think we are. Organisational/professional identity relates to knowing others and ourselves (insiders e.g. colleagues and outsiders e.g. clients) within specific distinctive and relatively enduring bounds (Jenkins, 2008, p. 169; Kenny, Whittle & Willmott, 2011; Hatch & Cunliffe, 2013). This latter manifestation of identity, organisational/professional, relates to the 'bounds' defined by the purpose of that organisation. The term organisation implies structure; framework; regulation; purposeful action; procedure and practice. Yet organisations are actually varying complex arrangements of individual and collective identifications. However, what makes a collective an organisation is its awareness of its name and its ability to voice its purpose. It also has a sense of internal differences and therefore awareness of and distinction between members and non-members (Jenkins, 2008).

At the most basic level identity is the human requirement to know (Jenkins, 2008, p. 5). It is not an entity, or a thing, but an evaluative, or classification process, and therefore is to some extent reflective (Stets & Burke, 2000, p. 224). However, much of this process is unconscious, in which comparisons are made between similarities and differences in both singular (individuals) and plural (group) situations. This classification or evaluation process is an active one and therefore is something one does, rather than being something one can have (Jenkins, 2008). It is through this evaluation a self-concept is developed. It is through interaction with other individuals and groups of individuals or communities, in

which values and emotional significance is evaluated, that leads to the emergence of a social identity (Jenkins, 2008; Tajfel, 1982a; Tajfel, 1982b).

Such identifications are both conscious and unconscious and allow the individual to consider to what extent they feel they belong to a group. An adolescent, for example, may start to follow a particular group of peers he first meets at his new high school, who engage in anti-social behaviour. He may choose to stay with them because he has a sense that this is what teenage boys do. Additionally, he does not wish to appear different from his peers, there is a feeling of both belonging and a desire not to appear odd. However, he may find the anti-social behaviour is counter to the personal ethics or values he has developed as a member of a church-going family. This in turn results in his breaking away from the antisocial group towards others with more shared values. Of course, he may maintain membership of several disparate groups. For example, he may play team sports with his anti-social group, whilst sharing other pursuits with his church friends and thus avoiding potential conflicts by seeming to reject one group for another.

A similar classification process is evident in the emergence of an organisational or professional identity. This is likely to begin with the individual defining the distinctiveness of an organisations character (Gioia, Schultz & Corley, 2000). If this is attractive, it may lead to further consideration of its attributes and values and the relationship to the individual's own self-concept. Further, leading to considerations of the potential commitment of the individual to the organisation and the collective self-esteem gained through membership (Ellemers, Kortekaas & Ouwerkerk, 1999). Self-concept (as an individual or as part of a group) is certainly much more complex than this basic description suggests. However, it acknowledges the contribution of others, including group membership/s to the development of personal identity (Tajfel, 1982b, p. 2).

The concept of identity only makes sense as a process of *"being or becoming"* and viewed in the context of relationships between individuals and communities founded on scales of preference (Jenkins, 2008, p. 17). As a comparative process of weighing up the dynamic relationships of similarities and differences, it is never a settled matter, for even in death identities evolve (Jenkins, 2008, p. 17).

Consider the martyr, originally killed for extolling views counter to the then establishment views, who becomes saintly over time. In contrast, the identity of an

infamous dictator who raised their nation to prominence through conquest is a matter of social and historical perspective. This aspect of identity theory has a particular resonance with a pragmatic worldview. Here, propositions, which are themselves socially constructed, are never fixed and only accepted based on their utility to the individual at a given time.

For identities to influence actions or behaviours, they cannot be disinterested. They must matter to the individual and those individuals comprising a group or community. A debate exists around the question of whether it is the pursuit of an identity or the pursuit of interests that matters. Barth (1969, in Jenkins, 2008, p. 7) stated identity is the emergent by-product of individuals pursuing their own interests. Ellemers Kortekaas & Ouwerkerk (1999) also made this point, when they suggest attraction to a collective (group, organisation or profession) is influenced by the potential self-esteem gained by membership. Tajfel (1982b, p. 2) on the other hand implies the value and emotional significance of membership is in itself sufficient to generate identity, particularly group identities. He suggested reward seeking is not just a matter of materialism or self-gratification, but is equally related to the emotional attainment of a sense of belonging. Identity, in all its forms, may be considered as a by-product of social interactions in which individuals pursue their interests or seek rewards. However, those interests or rewards include simply belonging', which in turn influences behaviour in favour of in-group favouritism and out-group discrimination.

Roccas and Brewer (2002, p. 88) point out that most individuals have multiple social/group memberships. They suggest understanding how these memberships are structured has value because of the influence in-groups have on self-concept. Additionally, they also influence the relationships between the individual and others, especially with those deemed out-groups. Turner (1982, p. 15) describes two models to explain how an aggregate of individuals become a group and how the grouping influences behaviour. He terms the models the social cohesion and social identification models. In the former, a group configures because of mutual attraction and influence and can be said to be because of affective group formation, through the development of reciprocal positive emotional bonds. In the latter, two or more individuals perceive themselves to be a part of the same social category. This model implies membership is cognitive, based on the individuals understanding of themselves and others through abstract categories which

become their self-concept and which in turn determines group behaviour. In this model the individuals primary question is not whether they like the individuals in this group, but is “*who am I*” (Turner, 1982, p. 15)? It is about self-perception and the resultant perception of commonality. Rather than joining people we like we tend to like people we perceive we are linked with on some level. Thus, it has implications for intra- and inter-group behaviour, cooperative altruism and social influence.

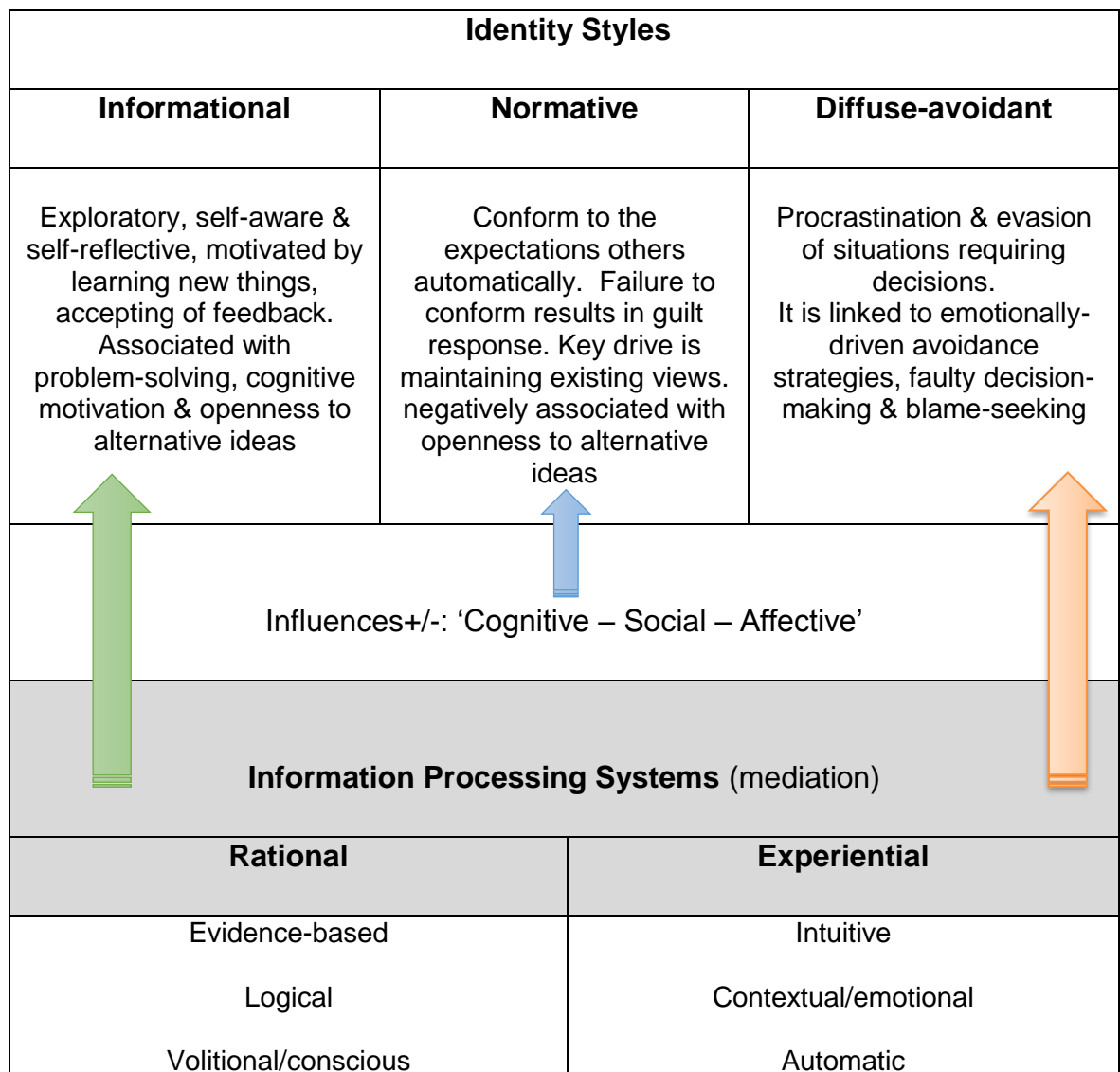
Berzonsky (2008) supports the role cognitive processes play in identity formation and further, describes three identity styles that refer to the individual preferences used to engage with, or avoid the tasks of constructing, maintaining or revising a self-concept. The three styles key characteristics are summarised in Figure 1.3. The informational style is displayed by individuals who actively explore, process and evaluate self-relevant information and engage in systematic decision-making practices (Berzonsky & Ferrari, 1996). They are interested in and motivated by learning new things about themselves through reflection and feedback. Berzonsky and Kuk (2005, p. 235) found “*university freshmen*” with this style were well prepared for the university experience. They possessed higher levels of academic autonomy, a clear sense of the purpose of university education, were socially skilled and generally performed well academically.

Normative styles describe individuals who internalise and conform to the expectations and standards of others automatically. Should they discover discrepancies between their normative standards and behaviours they respond with feelings of guilt. They are also concerned about how they can avoid failure, thus key to them is the maintenance and defence of their existing views (Berzonsky, 2008). Berzonsky and Kuk (2005) found, although they had a strong sense of their academic direction, they were less tolerant individuals and tended to be less academically and emotionally autonomous, generally requiring more support.

Those individuals with a diffuse-avoidant identity style tend towards maladaptive decision-making strategies. This includes procrastination, excuse making and evasion of identity conflict or situations requiring decisions (Berzonsky, 2008; Berzonsky & Kuk, 2005; Berzonsky & Ferrari, 1996). They are relatively disadvantaged in comparison with those utilising the other two styles. With respect to the university freshmen, they were less prepared for university. They

also lacked clarity about the purpose, or their sense of direction, within the educational system. They tended to be less skilled socially and less likely to perform well academically (Berzonsky & Kuk, 2005).

**Figure 1.3: Social-cognitive model of ‘Identity’ development, maintenance and revision (based on Berzonsky, 2008)**



These styles represent relatively stable differences in problem-solving, decision-making and processing identity-relevant information. They also appear to be more or less established by late adolescence, or early adulthood (Berzonsky, 2008; Berzonsky & Kuk, 2005; Berzonsky & Ferrari, 1996). The significance of these styles is not just with respect to identity formation, maintenance or revision. They are also relevant to the subsequent individual expressions of attitude and behaviour. For example, the informational style is associated with problem-solving, cognitive motivation and openness to alternative ideas. In contrast, the

normative style has a negative association with openness to other views, ideas, or actions, but is positively associated with a requirement for closure in uncertain situations. The diffuse-avoidant style is linked to emotionally driven, hedonistic avoidance strategies, maladaptive decision-making including pre-decision procrastination and post-decision blame-seeking (Berzonsky, 2008; Berzonsky & Kuk, 2005; Berzonsky & Ferrari, 1996).

Berzonsky (2008) goes on to postulate two information-processing systems, rational and experiential. He postulates that they have a role to play in developing a self-concept and the resultant adaptive behaviours required to maintain that identity. The rational system is reason-based processing of symbolic information in a logical, volitional manner and reliant on evidence to justify resulting actions. The experiential system is intuitive and relatively automatic, in processing contextualised and emotion-laden information. This system tends to be default system simply because it is fast and effortless, but it is prone to bias. The rational system, although requires greater effort is less prone to error.

Berzonsky and colleagues (2008; 2005; 1996) argue identity is a complex construct established through a cognitive identity-style, mediated by a processing style. The two are summarised in Figure 1.3. Berzonsky (2008) recognises processing identity is additionally contextual (social) and affective (psychological/emotional) and thus implies identity develops from an interplay of all three, cognitive, social and affective. For example, Berzonsky (2008, p. 654) identified males, from a cohort of 238 psychology college students scored higher on the diffuse-avoidant style than females. He postulated this might reflect varying gender-role socialisation processes in which young males are generally afforded greater freedom, less supervision and therefore are more prone to develop self-gratification behaviours. Older individuals tended to score more highly on the informational style compared to younger participants. This tends to support the notion that identity styles are developed overtime and not fully established until late adolescence, or early adulthood in the majority individuals (Berzonsky, 2008; Berzonsky & Ferrari, 1996). There was a greater tendency for younger individuals to use the normative style. This may reflect the importance of peers and role models in the social development of adolescents. Therefore, fear of standing-out may lead to a tendency amongst teenagers to conform to the standards and values of their reference groups (Berzonsky, 2008). Additionally, it may be



indicative of their earlier development phase. Here, the ability to cope with complex informational demands the capacity to process, reason appropriate decisions, and be willing to expend cognitive efforts in processing such information is simply not as fully developed as more mature individuals (Berzonsky & Ferrari, 1996).

Berzonsky (2008) found those utilising the informational style were equally adept with rational and experiential processing. Whereas, normative style individuals largely favoured experiential processing, adopting an automatic response to their reference groups standards in the face of identity-significant information. Diffuse-avoidant individuals exclusively utilised experiential processing. This reinforced the notion they exist in an emotion-focused, hedonistic manner, with little concern for rationalised decision-making and long-term consequences and costs, preferring short-term fulfilment (Berzonsky, 2008; Berzonsky & Ferrari, 1996). The work of Berzonsky and colleagues (2008; 2005; 1996), summarised in Figure 1.3, illustrates the complex and inter-related nature of the identity construct and the values and behaviours displayed by the participants in this study.

Interestingly, Turner (1982) who favoured the cognitive social identification model postulated a theoretical concept of social groups integrating the two previously described models (social cohesion and social identification). This is an acknowledgement that both cognitive and emotional factors influence social categorisations. These, in turn define the individual by including them in some and excluding them from other categories. This resonates with Tajfel's (1972, p. 31, in Tajfel, 1982b, p.18) social identity definition as, *"the individual's knowledge [cognitive] that he belongs to certain social groups, together with some emotional [affective] significance to him of the group membership"*.

Ellemers, Kortekaas and Ouwerkerk (1999, p. 372) support these ideas by linking the components of the two models. Cognitive awareness of group membership (self-categorisation) is considered evaluative, positive or negative implication of a specific group membership (identity commitment). This appears to have some relation to Barth's (Jenkins, 2008, p. 7) contention that identity is a by-product of self-interest (self-esteem). Ellemers, Kortekaas and Ouwerkerk (1999) also accept an emotional involvement with the group, or an affective component. What emerges is a multi-factorial identity construct acknowledging that all aspects of the envisaged self are socially influenced. They acquire meaning and significance

only through shared understandings (language) within contextual social interactions between individuals. Such a view has led Ashmore, Deaux and McLaughlin-Volpe (2004) to suggest an alternative term to social identity would be collective identity. This does not differentiate between varying forms of identification, including personal, relational or associational. Instead, collective identity relates to the individual's connection to a group of people outside the self. It may include people with whom they have an emotional connection, such as their family; but could also include people they have not even met, but never the less have a connection such as gender, religion, nationality or profession.

This section has considered personal and social, or collective, identity formation and suggested the expression of such identity is through professed values and actual behaviours. It is therefore valuable to consider the attraction to and development of an organisational and specifically professional identity. Professional identity is used throughout this thesis when discussing this concept. It is helpful to understand how this identity emerges as the individual's public face and how it may become the most significant identity for many individuals. It is a truism that when meeting new people for the first time one of the first questions asked is "*and what do you do?*". The implication is that this response defines the individual. The emergence of a professional identity is the focus of the next section.

### **1.3.2: Professional and organisational identity**

Jenkins (2008, p. 169) describes organisations as bounded networks of individuals, and thus of identifications (categories), both individually and collectively which influences who does what and how. These bounds incorporate concepts of organisational purpose, image and coordinated procedures to maintain and develop the institution. Within these bounds, organisational identifications exist such as roles and responsibilities; or presentation expectations, including appearance, communication and behaviour. The identifications are specified, both formally and informally. This is also true for the procedures for recruitment to that organisation and the regulation and monitoring of adherence to the identifications, for example performance expectations (Gioia, Schultz & Corley, 2000; Jenkins, 2008). This may be illustrated through consideration of an NHS Physiotherapy service. An individual's identity is ultimately bound in being an employee with set roles and responsibilities. These

include, for a Band 5 Physiotherapist, the ability to assess and treat their own caseload, maintain records and supervise support workers/students. A Band 6 may also supervise, train and assess less experienced physiotherapists, support workers and students; and may participate in research. A Band 7, in addition, may act as a clinical lead for specialist areas of work; provide specialist advice within the trust and to other healthcare professionals; and lead clinical audits. Finally, a Band 8 may lead development of their specialist area and be a key contributor to multidisciplinary services, providing expert advice within the organisation and externally, and be responsible for clinical governance (NHS Employers, 2005). Each role has a distinct identity defined and understood by all members of that organisation.

Therefore, the individual job specification, or the role/s within the organisation in part, defines identity. However, each individual also has a collective identity defined by the ultimate purpose of the organisation and the public-perception of that organisation by those who deal with it. These include commissioning groups, other health and social care agencies and professionals, for example, Social Services or medical equipment companies. Vitally, it also includes service users (including relatives and carers) who access the physiotherapy services available and hold their own view of the physiotherapy identity (Health Careers, NHS, 2016; Jenkins, 2008).

The notion of professional bounds finds the individual attracted to specific professional roles and values. In the example of the physiotherapy roles, these include helping and treating people with physical problems caused by illness, injury, disability or ageing. Human movement is considered central to the health and wellbeing of individuals by the physiotherapy profession. Therefore, physiotherapists aim to identify movement and function problems and maximise functional potential; and in addition to treating people, they promote good health and provide advice on how to avoid injury/ill-health (Health Careers, NHS, 2016). In turn, the prospective physiotherapist will attempt to demonstrate characteristics associated with the profession. In seeking entry to the profession, they must demonstrate common ground with the discipline, their educators/mentors and peers (Sparkes, 2002). In striving for and attaining that common ground they are identified by non-members of that profession (general public/service users) as belonging to it.

For organisations or professions to survive, they must attract and retain an ongoing supply of new members. Oakes and Turner (1986) suggest it is the distinctiveness and prestige of a profession that attracts individuals to aspire to join it. However, the distinctiveness of a professional identity does not always have to be a universally positive one to be strong and desirable. Mueller *et al.* (2008) investigated nurses working in NHS Direct call centres, providing telephone-based patient advice. They had managerial targets for the number and length of calls. However, in fulfilling this role they perceived a conflict with their professional identity, which was related to caring and showing empathy for their patients. This resulted in recurrent failure to meet the managerial targets. In this case, professional identity superseded managerial coercion (organisational bounds) causing friction between the managers and the profession.

The ability of a group to feel strongly about their identity in the face of others (managers) negative view, clearly denotes the depth of commitment such identities can instil. This in turn can be very attractive to those aspiring to attain that identity. Waring and Currie (2009, p. 755) also identified the potential conflict between organisational demands and professional autonomy. They suggest this can be attenuated through “*dynamic mediation*” at an organisational context level. Thus, strategically incorporating organisational strategies and techniques into both ‘professional practice and identity’.

There is general agreement the concept of identity is complex, multi-faceted and inter-related and has led to the development of a plethora of theories and concepts (Stets & Burke, 2000, p. 224). In the context of this thesis, the overlap between ideas is acknowledged. Indeed, the varying presented ideas are linked in fundamental ways to offer a more unified understanding of the issues and their role in understanding individuals’ characteristics. Therefore, by considering personal identity as ‘I’ and social identity as ‘me’, professional identity should be considered as ‘us’, the group equivalent to ‘me’. ‘We’ then emerges as the group equivalent of ‘I’, as members interact with each other in fulfilling the specific role or expectations of ‘us’ (Hatch & Cunliffe, 2013, p. 313). Returning to the personal identity ‘I’, emerging within a specific social context, for example a child hears “*you are so strong*”, or “*you are very clever*”. This leads overtime to ownership of these attributes and the formulation of aspects of a self-concept about ‘my stature’ and ‘my intelligence’ from which evaluations with others can be made. Ownership of

the social identity 'me' leads to the self-concept of 'I', allowing further evaluations of where the individual sits within their social groupings.

In a similar way when professionals interact with each other and to an extent with external stakeholders, it leads to a deeper understanding of us. This is the purpose, roles and responsibilities which is equivalent to the social identity 'me'. Such appreciation, in turn, leads to the development of an individual's professional identity, 'we'. This relates to "*we rehabilitate*", "*we motivate*", "*we decide*", "*we evaluate*" "*we continue to learn*" and is equivalent to the self-concept of 'I'. This goes some way to explain how individually important professional identities can be for individuals.

For physiotherapy students, 'us' most likely emerges from interactions in university and on clinical placement with academic and clinical staff, service managers, members of other HSCP's, service users, relatives and carers; and also the influence of HCPC and CSP professional requirements. The 'we' likely emerges during formal and informal 'discussions' with peers, academic and clinical staff, when exploring the issues surrounding 'us'. Where consideration is given to what the profession is and does. This process likely utilises cognitive (processing) and social and affective influences on identity style to confirm the affinity the individual has to that identity (Hatch & Cunliffe, 2013).

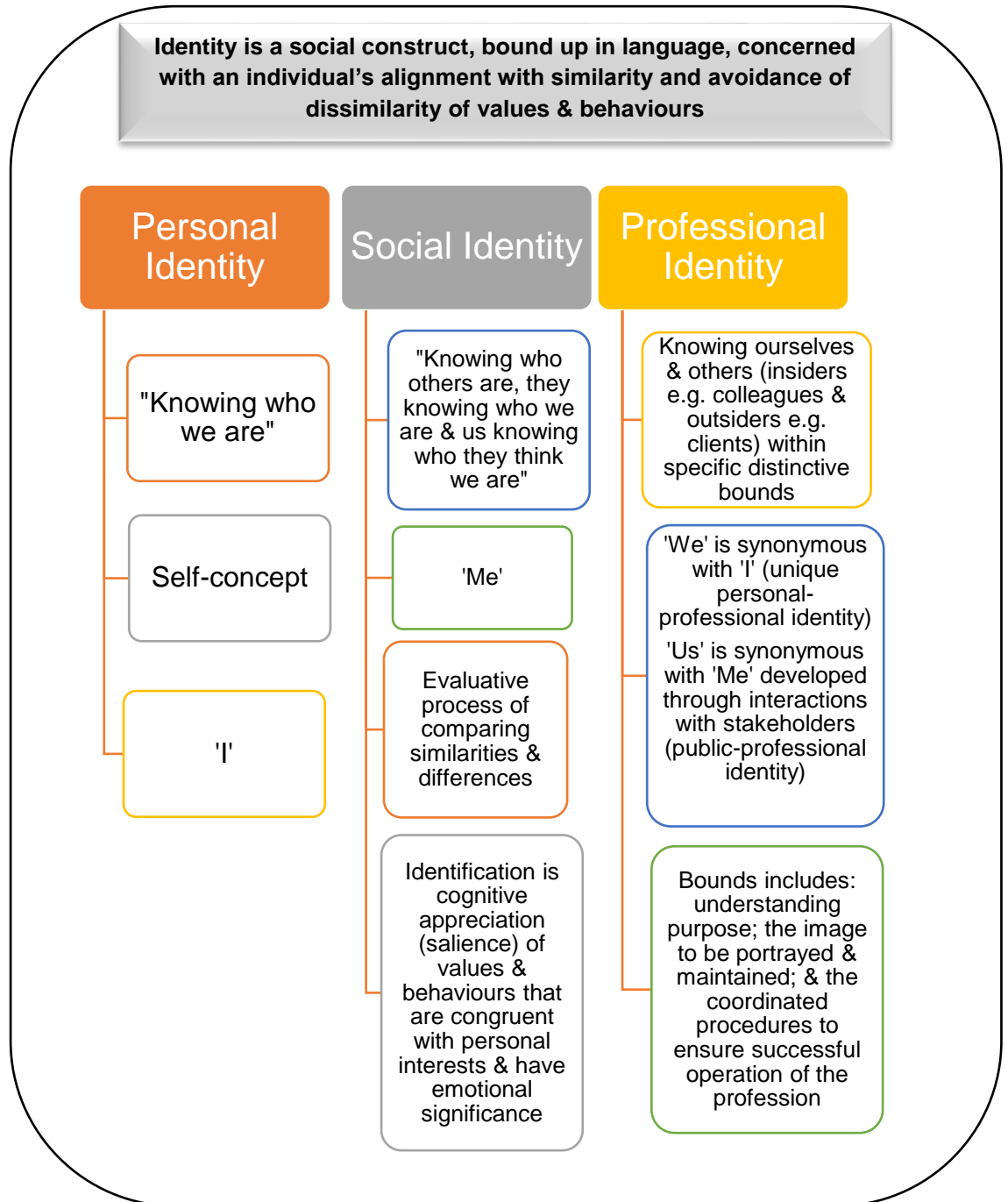
This concept of a developing professional identity, summarised in Figure 1.4, is based on a pragmatic social construction concept inspired by George Herbert Mead. It points to organisational identities as being somewhat less 'enduring' and more malleable in response to internal and external stakeholder interactions and requirements (Hatch & Cunliffe, 2013, p. 313). However, as in the nursing example (Mueller *et al.*, 2008), some professional identities and the values and behaviours they encompass can be hugely important to the individual. Further, they can illicit resistance to any change that is perceived as a threat to the 'meaning' of that identity. Again, this concept confirms identities, even at the level of the individual, emerge from human interactions and can therefore be considered social constructions (Gioia, Schultz & Corley, 2000).

In accepting this concept, it becomes clear that professional identity is not simply the natural consequence of developing profession specific knowledge and skills. Rather it is a social construct of a collective of individuals identifying themselves

as being unique and valuable. Thus it is a commodity in which rewards, both social (pay, conditions, career structure, social standing) and psychological (self-esteem) are likely to be high (Kenny, Whittle & Willmott, 2011, p.86). This reinforces the postulation made earlier that identity is a cognitive, affective and socially derived process (Berzonsky, 2008; Berzonsky & Kuk, 2005; Ellemers, Kortekaas & Ouwerkerk, 1999; Berzonsky & Ferrari, 1996; Turner, 1982; Tajfel, 1982b). Simply entering a profession does not confer professional status.

Professional career choices themselves can be regarded as a process over time. This requires investigation of the varying professional options. This leads to exposure to professional roles and responsibilities, which in turn leads to a naïve formulation of, or attraction to, a particular professional identity, a proto-identity. Ohman, Solomon and Finch (2002) investigating Canadian physiotherapy students' career and professional choices discovered all the students were very knowledgeable about their profession prior to entry onto the programme. However, although early pre-course identification is both possible and desirable, professional identity can only fully develop through a learning process. This includes education, training, and socialisation to the real professional working world (Trede, Macklin & Bridges, 2012; Adams *et al.*, 2006; Ohman, Solomon & Finch, 2002; Richardson, 1999a).

**Figure 1.4: Diagrammatic representation of the relationship between personal, social and professional identity**



The development of a professional identity is multifaceted. It includes how one presents to and engages with outsiders, those not of your profession including other professions, services users or clients, or the wider public. This is a key aspect to being a professional and entwined with notions of the social relationship of the profession. This acts as a form of regulation to those already holding, and those aspiring to attain, that professional status (Kenny, Whittle & Willmott, 2011). It has led to the formalisation of the relationship through professional and

registration body standards Hatch and Cunliffe (2013, p. 250) and Evetts (2013, p. 783) equate this form of professional regulation in Foucauldian terms as a form of 'disciplinary power'. That professional regulation leads to behaviour change, in this instance to self-monitoring and regulation. There is no judgement of this as good or bad, only an acknowledgement that 'normalisation' within a professional identity comes with certain expectations of behaviour, structure and order (Evetts, 2013, p. 783). It simply is a consequence of the society-profession relationship in which rewards are conferred (autonomy) based on the perception of value to the wider society. This may well be another aspect of professional attractiveness that ensures continued applications and the longevity of professions.

It has been stated that identity is never settled, but is dynamic and evolving and this is helpful when professional identity is explored. HSC is an ever-changing arena with new research and technological innovations and political directives. The last two decades have seen dramatic changes towards more cost-aware, cost-effective and market responsive services (Adams *et al.*, 2006; Richardson, 1999b). Instances where services have been poor have highlighted the need for greater accountability and better communication and interactions between professions. The public inquiries into the failings of the children's cardiac services at Bristol Royal Infirmary; and the death of Victoria Climbié identified that education and training required reform to promote patient/client-centred collaborative working (DH, 2001a; DH, 2003; Adams *et al.*, 2006). This move has demanded HSCP's become much more accountable for both their use of resources and their own practice outcomes. There has been a drive to change the underpinning philosophy of HSC practice. This has seen a shift towards person-centred, collaborative or interdisciplinary teamwork approach. In this model, patients are empowered to self-manage, with professions providing care and support. This differs from the traditional disease-orientated treatment model, where expert professionals cure the clinical problems encountered (DH, 2001b; Richardson, 1999b; Adams *et al.*, 2006).

Such drivers for change create a potential threat to professional autonomy, often viewed as one of the most desirable rewards of professional status and fundamental to the professional identity itself. Because professions are socially constructed, even described as 'moral communities', they are naturally subject to change as the social context of the people they serve alters (Evetts, 2013, p. 788;



Richardson, 1999a). However, most health care professional identities have been traditionally grounded in a specific working world, often hospital based. Recent changes to health services place HSCP's in a multiplicity of worlds or communities of practice. This adds to the complexity of developing and maintaining a distinct professional identity (Trede, Macklin & Bridges, 2012). Several perceived threats result from changes in practice towards patient empowering and managing models in diverse community settings. One such threat is the loss of professional identity to the ambiguous creation of a generic HSC worker, with the subsequent loss of profession specific expertise. However, professions and professionalism has never been a fixed concept and therefore alternatives are possible (Evetts, 2013). For example, retaining individual professions and exploiting common professional skills in team working, whilst simultaneously retaining the unique expertise of each profession. In the latter scenario, it is of equal importance to individual HSC professions to create and maintain an unambiguous public image of the profession. This makes clear its unique purpose and unequivocal value to society. The demand for change requires professionals to review the organisational normative value system of control from above, against the ideological control system from within (Evetts, 2013; Adams *et al.*, 2006; Richardson, 1999a).

Accepting professional identity represents characteristics shared with others within a professional group; and relates to the expectations of the profession itself, outlined by standards and codes (HCPC, 2016; CSP, 2011). Then the specific roles and responsibilities undertaken by the individual, as a representative of that profession is an aspect of that individual's self-concept, albeit associated with their adopted work role. The identifications an individual makes with a profession, such as physiotherapy, implies an evaluative process. This incorporates the critical comparison of similarities and differences based on conscious and unconscious acceptance and appreciation of values. Much of the evidence-base has commented on the complexity of recruitment without identifying what the personal characteristics required by the specific profession actually means. The nature of the challenge of recruiting individual's fit-for-purpose is to be clearer about what that challenge is from the outset. From such research, this study included, understandings can emerge of the importance of individual personal characteristics and their alignment with, and suitability for a career as a HCP in an environment of change and super-complexity.

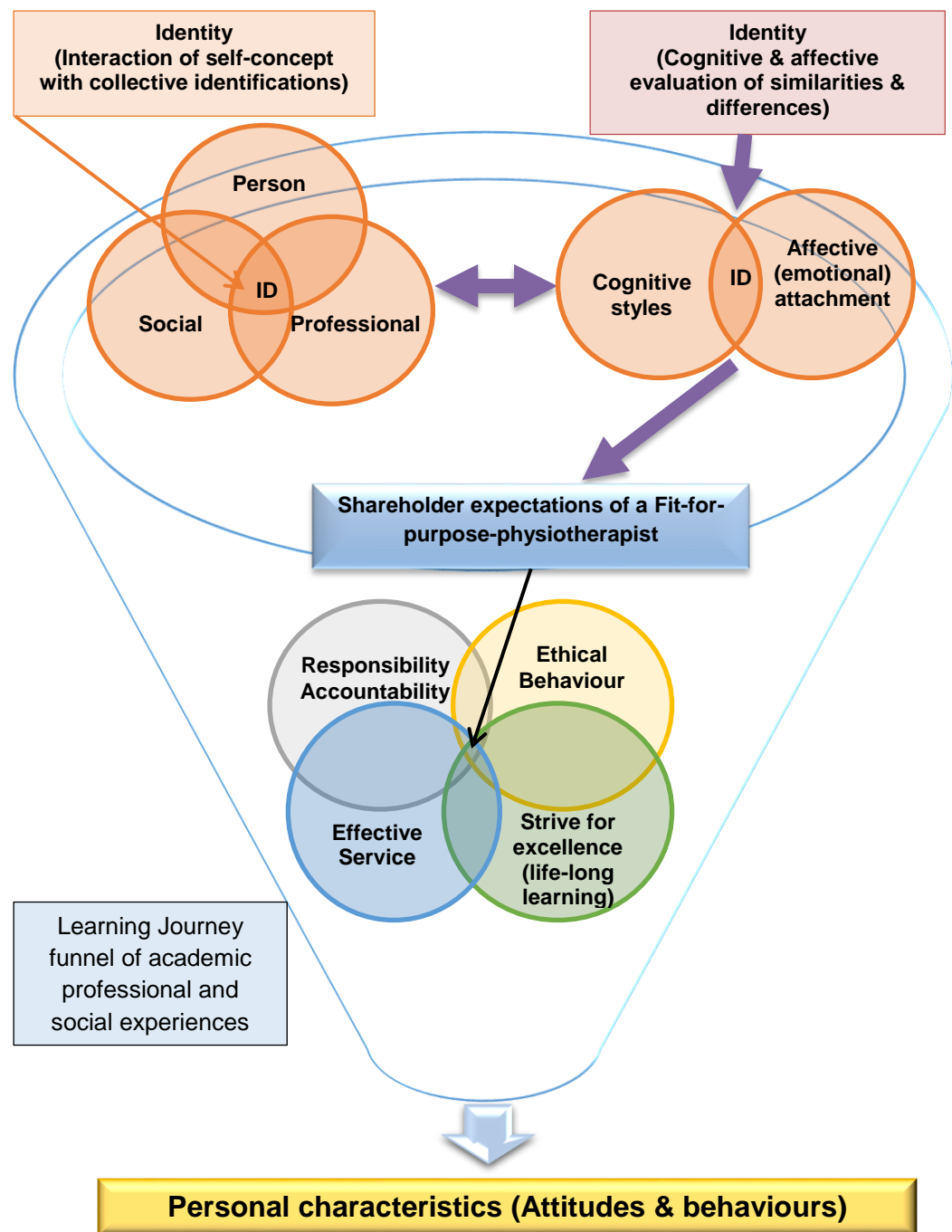
Professional identities emerge at the intersection of personal, social identities and professional exposure through authentic workplace experiences. These experiences provide opportunities to investigate the emergence and importance of characteristics in students through their learning journey towards registered professional status (Jenkins, 2008). In the context of this thesis, students (participants) may display aspects of their emerging professional identity and personal characteristics when recounting their experiences of their physiotherapy-learning journey. It is envisaged this will conceptualise what specific personal characteristics impact on progression through their degree.

#### **1.4: Purpose of the Study**

This study aims to identify and conceptualise the role of personal characteristics on the progression of students through their physiotherapy degree. Identity theory and specifically the professional expectations (see Figures 1.1 & 1.2) of 'fitness-to-practice' (CSP, 2011) will be used as an underpinning conceptual model in developing the analytical framework. This will also be utilised in the resultant analysis and interpretation of data in this study. The underpinning theoretical model is summarised in Figure 1.5. Here, the established personal and social identity of the individual, embarking on a learning journey towards physiotherapy registration, is subjected to experiences that shape the developing professional identity. In the shaping of a new identity, it is envisaged personal characteristics will emerge and develop into desirable professional characteristics. This will occur as the individual responds to and manages the varying challenges experienced on their learning journey. Through investigation of the learning journey, it is envisaged that a clearer understanding of which personal characteristics influence success will emerge.

A clearer understanding of the influence of personal characteristics on the attainment of healthcare professional status will have a number of valuable outcomes. Firstly, to influence my role as admissions tutor, the development of the admissions strategy and the recruitment processes. This enhancement is through a better understanding of which characteristics have a positive, negative or ambiguous impact on progression and attainment of professional status.

**Figure 1.5: Conceptual model of the influence of a developing professional identity on individual personal characteristics**



Secondly, improved awareness will facilitate the search for, or development of more reliable and valid evaluation/assessment methods targeting specific personal characteristics. This in turn should enable the recruitment team become both more accurate and transparent in recognising the characteristics most likely to facilitate successful progression through the programme and ultimately meet the professional expectations of stakeholders. Such understandings could assist in reducing psychosocial and financial costs to the individual applicants/students by

facilitating better-fit recruitment and more focused support services to those with clear potential but having identified barriers to their achievement. Reduced attrition and smooth progression (defined as the absence of negative academic, placement or personal issues) is desirable for all stakeholders. A challenged journey is defined as one in which negative academic, placement or personal issues contribute adversely to the learners personal experience and, or progression through the degree. Therefore, the findings should be of value to other admissions tutors working in the same HEI, as well as those involved with recruitment and selection throughout the sector. The NHS, via HEE and locally HENE could also be interested in the outcomes of this study. It may add to the body of knowledge informing the development of the VBR strategy. Further, this could positively influence best-fit recruitment, reduced attrition and ultimately the provision of high quality, safe and effective health services.

It is not intended the findings of this study will lead to the development of more refined barriers to entry to physiotherapy programmes at this HEI. The multifactorial nature of this topic suggests individual applicants are unlikely to fall neatly into clearly suitable or unsuitable categories. For those recruited with the potential to succeed, a better understanding of personal characteristics and the implication when certain characteristics are limited or absent allows the opportunity to develop more focused support mechanisms. Such understandings may also influence curriculum development to facilitate progression for those challenged by their journey. An important point is to understand why individuals recruited with an appropriate academic track-record struggle. This is unlikely to be due to a deficiency in academic ability. Morris & Farmer (1998) support this point by suggesting selection to HSCEP's is complicated by oversubscription to a limited number of places by similarly qualified applicants. Therefore, understanding the potential influence of personal characteristics on progression (other than the unpredictable emergence of health/personal issues) must be viewed positively.

## **CHAPTER TWO: METHODOLOGY**

### **2.1: Research question, aims and objectives**

**Research Question:** Do students learning journey experiences illustrate personal characteristics influencing progression through their physiotherapy degree?

**Aim:** To identify if students learning journey experiences indicate the presence of personal characteristics that influence (positively or negatively) on progression through the three-year physiotherapy degree programme by conceptualising the relationship between personal characteristics and notable points in their degree-learning journey.

**Objectives: This study will:**

1. Conceptualise the specific personal characteristics illuminated by students' personal learning journey experiences
2. Ascertain the extent identified personal characteristics affect progression through the programme.
3. Gain insight into the relationship between existing admissions criteria (based on 'cognitive', previous academic achievement), personal characteristics and student programme performance (based on academic grade point average and professional clinical formative feedback).

### **2.2: Background**

The literature review was vital in framing the research question and informing the methodology for the study. This ensured the existing and emerging evidence-base and related policy drivers maintained the focus and relevance of the research process. The literature review identified the issues surrounding admissions criteria onto HSCEP's as important, multifaceted and complex resulting in a dilemma for the researcher. The recommendations from the Francis report (2013) and the subsequent Department of Health (2013) mandate to HEE was to prevent any recurrence of identified service failings. This would be achieved by delivering high quality care through recruitment and development of the workforce with 'the right skills and the right values' (DH, 2013, p. 1). However, it is acknowledged there is a lack of consensus about the specific criteria deemed most valuable and that there is a complex relationship between values, behaviours and attributes.

Additionally, there are inherent challenges in assessing and measuring values for recruitment; and recognition of the limited evidence-base relating to values based recruitment (VBR) (Work Psychology Group & HEE, 2014, p.3). Furthermore, it is acknowledged in the Education Outcomes Framework (EOF) report (DH, 2014, p. 5) that the indicators or outcomes for VBR are not well developed, and the evidence for cause and effect is complex.

The study seeks to explore a complex contemporary and practical problem that is not well understood by the current evidence-base. The nature of VBR is deeply rooted within the participants (including the researcher's) personal knowledge and life experiences. The participants embark on their professional career because they perceive it is 'right' for them and they are suited to it. They may or may not be aware of the inter-relationship between this decision and their personal identity and the professional identity they aspire to.

The study also includes the researcher as participant and as gatekeeper to the profession and to service-users. The admissions tutor is the developer of the local recruitment strategy. They are responsible for admitting students with "the right skills and the right values" (DH, 2013, p. 1) and therefore the researcher context must be considered. Furthermore, this issue is innately specialist in terms of the uniquely held perspectives of the participants, researcher and varying stakeholders (NHS/HCP/CSP/HEI/service-users). In addition, the topic is potentially sensitive, delicate or intangible because it explores individual identities through recognition of culturally based personal characteristics. Understanding the meaning of these factors with respect to the acquisition of a professional identity and suitability for a specific HSCEP and its unique professional role poses challenges to the apprentice researcher (Ritchie *et al.*, 2014; Seale, 1999).

### **2.3: Methodological consideration**

To advance the knowledge base, the development of a theoretical framework is vital in providing a guide to the conduct of the research, analysis and evaluation of the data (Angeles *et al.*, 2014). However, Tashakkori and Teddlie (2003) describe how over recent decades a polarisation of research methods has effectively created two epistemological enclaves. Positivists hold the belief in a single reality, the truth of which is revealed through objective, value-free research. In contrast constructivists/interpretivists, hold there are multiple realities and subjective

research is the only way to gain understanding (Feilzer, 2010). More broadly, the terms quantitative and qualitative respectively describe the two positions. Numerous authors (Morgan, 2014; Creswell & Plano Clark, 2011; Feilzer, 2010; Leech & Onwuegbuzie, 2009; Morgan, 2007; Onwuegbuzie & Leech, 2005; Tashakkori & Teddlie, 2003) suggest reconciliation is both possible and desirable as they realise that the process of field-research “*does not comply with the qualitative-quantitative dichotomy*” (Tashakkori & Teddlie, 2003, p.62). The point of reconciliation has been posited as ‘pragmatism’ and the use of mixed methods approaches to research (Tashakkori & Teddlie, 2003, p.74; Tashakkori & Teddlie, 2010; Morgan, 2007).

The acknowledged founder of the philosophical movement of pragmatism was Charles Saunders Peirce (1839-1914). It was, however, championed and developed by his lifelong friend William James (1842-1910) and particularly by John Dewey (1859-1952) and George Herbert Mead (1863-1931) (Blackburn, 2008; Morgan, 2007). The basic premise is that truth is the understanding of reality that works best for us as individuals and communities, and that knowledge of what is true is gained through ‘doing’, or experience. Knowledge therefore is a tool for action rather than an end in itself (Ormerod, 2006). Pragmatism, as a philosophy, has no unified tenets but rather a collection of ideas, largely, but not dogmatically, held by those identifying themselves as pragmatists. Central to this philosophy is the ‘pragmatist maxim’ of gaining knowledge/understandings of a proposition by following the practical consequences of accepting that proposition (Hookway, 2015; McDermid, No date). Dewey saw philosophy not as an intellectual contention with an abstract problem, but as a practical response to real problems in people’s lives, seeking to engage and address these problems, in his words addressing “*the problems of men*” (McDermid, No date; Kloppenborg, 1996; Festenstein, 2001).

Research is necessary to define a specific problem within a specific context, which is appropriate to this thesis. The pragmatic approach begins in doubt, but far from being trial-and-error, it proceeds from existing warranted beliefs. These are professionally and experientially acquired and influenced by the existing evidence-base. The warranted beliefs are about the nature of the problem and the potential consequences of selecting one action or one research design over another

(Morgan, 2014; Festenstein, 2001). Repeated investigation concludes with a new or expanded warranted belief (Morgan, 2014; Festenstein, 2001). As pragmatists believe the results of inquiry are neither fixed nor unquestionable, the term knowledge is used in preference to truth. With provisional understandings, research inevitably leads to further research.

Pragmatists recognise learning is only in part cognitive, but mostly influenced by experience. This distinguishes '*knowing how*' from '*knowing that*'; truth implies cognitive certainty (Kivinen & Ristelä, 2003, p.366) an idea that resonates with the idea of doctoral studies representing a research apprenticeship (Seale, 1999, p. 475). Truth or '*knowing that*' can only be judged by a community deemed competent to make such judgements, not by the originator of the warranted belief (Festenstein, 2001, p. 733; Garrison, 1995, p. 719). This stems from the Deweyan belief that there can be no settled belief. The consequences of any action (research) are context specific and subject to change over time. Therefore, warranted beliefs continually evolve, a stance known as '*fallibilism*' (Morgan, 2014, p. 26; Festenstein, 2001, p. 741; Cutchin, 2004, p. 305). Those expecting research to produce immutable truths, or principles, tend to be critical of pragmatism. However, supporters champion the move away from 'absolutes' towards the encouragement of '*independent thinking and democratic decision-making*' (Kloppenber, 1996, p. 106; Festenstein, 2001, p. 732).

Pragmatism is far from being a "*path of least resistance*", "*sloppy research*", or an "*anything goes approach*" (Morgan, 2014, p. xiii; Ritchie *et al.*, 2014, p. 20; Feilzer, 2010, p. 14). This negative view may have emerged from a confusion between the philosophy of pragmatism and an appreciation of being pragmatic, and "*dealing with things sensibly and realistically in a way that is based on practical rather than theoretical considerations*" (Oxford Advanced Learner's Dictionary, 2016). The link between the two is obvious from the Greek language origins meaning "*action*". However, philosophically, all human action is inextricably linked to the previous experiences of individual's and the historical context of the community they inhabit (Morgan, 2014, p. 26; Festenstein, 2001, p. 736). Contexts are subject to change therefore, warranted beliefs based on actions are equally subject to change. Their acceptance as settled beliefs, or in the wider context, as 'true', depends on shared experiences and beliefs between individuals.



It is only through such fusion that the interpretations of actions emerge and generalised utility be considered (Morgan, 2014, p. 27; Festenstein, 2001, p. 737).

This study seeks to explore the complex relationship between students' personal characteristics and their learning journey through a physiotherapy degree programme to professional registration. Such a relationship is practical in nature. The literature identifies personal characteristics as important in the successful development and recruitment of healthcare professionals. However, it is unclear about which characteristics are most important. My professional practice role (admissions tutor) requires me to develop a strategy and processes to select applicants with the best potential. This potential relates to the extent the applicants may successfully fulfil the academic, practical and professional demands of a physiotherapy degree programme. It also relates to the extent that they may be deemed fit-for-registration and employment as healthcare professionals (physiotherapists).

Schwandt (2014, p. 232) defined such practical problems as being 'ill structured', due to complexity. He stated the goals, methods and potential constraints are unclear at the outset and there is a distinct possibility of either multiple, or no, solution/s. Additionally, he suggested practical problems demand action in response because of the general form in which the researcher questions, "*what should I do now, in this situation, facing these circumstances*" (Schwandt, 2014, p. 232). Tashakkori and Teddlie (2010) equate practical problems with an everyday problem-solving process. Initially the researcher must identify the key issue/s of concern which could produce the most immediate and valuable results and articulate the specific question/s that guide the management and direction of the study. This is important if both causality ("*what has happened*") and causal mechanisms ("*how or why has this happened*") are to be determined (Tashakkori & Teddlie, 2010, p. 274). Following the identification of the key issues, actions required, relevant to addressing those issues must be determined. They should take the form of "*methodological eclecticism*" or consideration of the diversity of available tools to address the issues in the best way (Tashakkori & Teddlie, 2010, p. 274). This is a clear "*rejection of an either-or*" stance and one that sits well with my personal experience of clinical decision-making in both physiotherapy and educational practice (Tashakkori & Teddlie, 2010, p. 274).

From this broad consideration of options, the researcher must decide on the best actions to address the specifics of the practical problem. This includes being mindful of the evolving nature of practical problems as the investigation develops. Such a stance refutes the notion of pragmatic research as the easy option, but requires the researcher's development as something of a "*methodological connoisseur*" a status gained through research education and exposure to the evidence-base; craft apprenticeship; peer-reflections with research supervisors, critical-friends, peers and participants (Schwandt, 2014, p. 235; Tashakkori & Teddlie, 2010, p. 275; Seale, 1999, p. 475). In this case, it reflects personal development through the research apprenticeship process and support from supervisors and colleagues. Finally, adopting a practical problem-solving approach is analogous to translation research, or applying findings of inquiry to professional practice (DePoy & Gitlin, 2016, p.362). This approach requires an understanding of the iterative or cyclical nature of both problems and the process of investigating those problems, with a discernible practical outcome to effect change through policy. Value is in part determined through acceptance that propositions based on such work are "*historically perishable*" or fallible (Morgan, 2014, p. 26; Tashakkori & Teddlie, 2010, p. 275; Festenstein, 2001, p. 732).

In the context of a time restricted professional doctorate study, viewing this thesis as applied social research due to its commonality with applied social policy research (Ritchie & Spencer, 2002, p.305) a pragmatic world view was adopted. This is synonymous with my personal and professional orientations/experiences. It is also a view that leaves behind the "*forced-choice*" between post-positivism and constructivism, and abstract speculations on the concepts of truth and reality (Creswell & Plano Clark, 2011, p. 44). Rather, it is built on the assumption that interpretations are true if they result in, or assist in, actions producing desired or predicted results. The results emerge as warranted beliefs only if they are recognised by the community the research was undertaken with and for which the outcomes were intended (Morgan, 2014; Ritchie & Lewis, 2003, p. 14; Festenstein, 2001, p. 737). Further, the pragmatic view demands the primary focus is on the research question, again resonating with the aims of the professional doctorate, to investigate an aspect of a professional role with a view to making change.

### 2.3.1: Theoretical versus Applied Social Research

Theoretical or pure research is about generating new theories or testing existing theories. Applied research is about using knowledge, gained through research to aid in understanding a specific contemporary problem. As such, its objectives and design are constrained by the specific information requirements and the nature and context of the study (including time constraints) (Ritchie *et al.*, 2014, p. 28; Ritchie & Lewis, 2003, p.24). Applied social research along with underpinning pragmatism is concerned with the use of theoretical dispositions and empirical evidence for solving practical problems. According to Debra Rog (2015, p. 224) the infusion of practice evaluation with different theories aids practical problem solving. Theory, therefore, provides the guide for practitioners and evaluators, whilst lessons from practice provide contextual meaning to theory. Such use is itself a practical problem, with the resultant evidence raising further questions such as *“what should be done now; how does this impact on decision-making; and what are the consequences for utilising or rejecting this evidence?”* (Schwandt, 2014, p.235).

The best answer to the challenge of use is in ensuring the quality of the research undertaken. Here it is valuable to have methodological awareness to learn valuable lessons from a range of paradigms or shared beliefs. This needs to be tempered with awareness that excessive engagement can lead to anxieties and stasis in research practice (Seale, 1999). Morse *et al.* (2002) suggest that qualitative researchers should be responsible for the rigour of their inquiries by reclaiming reliability and validity strategies. They go on to criticise the surfeit of criteria and terms that have emerged for addressing rigour, for example “trustworthiness”. Rigour is apparently ensured through the application of other terms, such as “credibility, fittingness, auditability and confirmability”. In reality, this simply confuses meaning, and worse, makes the discernibility of rigour all but impossible (Morse *et al.*, 2002, p. 15).

Other authors share this view of confusion. Seale (1999, p. 471), for example, agrees, *“...quality in qualitative research does matter”*, but suggests ideas around reliability and validity are not appropriate for the range of issues/approaches addressed by qualitative researchers. Golafshani (2003, p. 603) argues the concepts of reliability and validity should be addressed in qualitative research but need to be redefined as ‘trustworthiness’ and ‘rigour’, with ‘triangulation’ as an


example of a 'validity [trustworthy] procedure'. Creswell and Miller (2000, p.124) agree there is a danger of perplexity for novice researchers, but suggest consensus is for a need to demonstrate measurement validity, or credibility, using several systematic and clearly identified validity procedures. These include triangulation, prolonged exposure, thick, rich descriptions and member checking. Additionally, a focus on the participants in the study and reflexive acknowledgement of the "*inseparableness of the researcher*" and the research process (Creswell & Miller, 2000, p. 129; Teddlie & Tashakkori, 2009; p. 209). As Hardy and Bryman (2009, p.543) state, no one approach can satisfy all the criticisms of quality in qualitative research, indeed to attempt to do so is likely to lead to inhibition to attempt any useful research. Therefore, to move forward researchers must adopt the "*core conventions of the research community*" (Hardy & Bryman, 2009, p. 543) and to this end the approach suggested by Creswell and Miller (2000) above, was followed throughout this thesis.

## **2.4: Method**

### **2.4.1: Setting**

The study took place in a University, in the North East of England and comprised study participants registered as full-time students on a BSc (Hons) Physiotherapy Programme. Participants were sampled from the then year two cohort (September 2012) in order to achieve the aims of the study within the period (Table 2.1). The BSc (Hons) Programme is a three academic year (September-June) degree programme delivered both at the university and in clinical placement settings (hospitals, outpatient clinics and a variety of community settings). The study was conducted at the University as this allowed greater control of the timetable (3-phase data collection), arrangement of mutually convenient interview appointments and the booking suitable private interview rooms.

**Table 2.1: Physiotherapy student cohorts available to sample**

Study Time-frame					
September 2013					June 2015
Study plan					
Ethics Clearance/ Recruitment - Nov 2013		Phase 1 Dec 13/Jan 14	Phase 2 Dec 14/Jan 15	Phase 3 June 2015	
Available physiotherapy student cohorts from which to recruit the sample					
BSc PT Sept 2013	<b>BSc PT Sept 2012</b>	BSc PT Sept 2013	MSc PT Mar 2013	MSc PT Mar 2014	

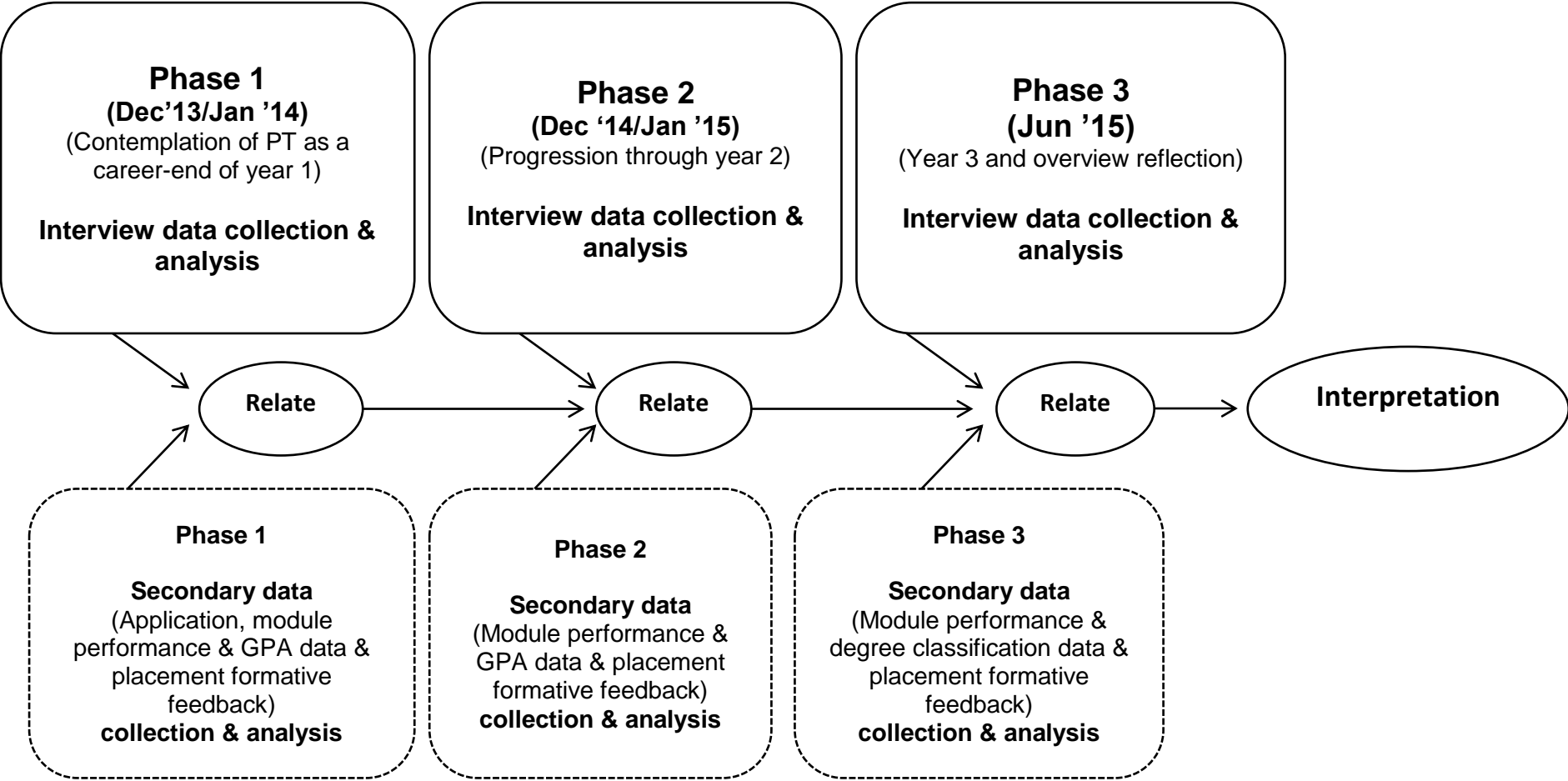
### 2.4.2: Study Design

A qualitative multiphase design was adopted for this study utilising the applied social research ‘Framework’ data management and analysis approach (see Figure 2.1). Applied social research, along with pragmatic underpinning, it is normally conceived as a pluralist approach and therefore associated with mixed methods. However, Ritchie and Ormston (in Ritchie *et al.*, 2014, p. 37) state there are numerous times when qualitative methods should be adopted as an independent strategy. This is particularly true where the subject matter is poorly defined or not well understood. In addition, when it is deeply rooted within the participants’ personal knowledge; is innately complex; is specialist in terms of uniquely held perspectives. Qualitative methods are indicated when the focus is delicate or intangible, culturally based, or, sensitive, in which it is difficult to predict the emotive nature of the subject matter (Ritchie *et al.*, 2014, pp. 37-38). This study was considered to relate to all of those points and therefore a qualitative approach was adopted.

### 2.4.3: Sampling

Physiotherapy students were recruited from one cohort (September 2012) from five possible cohorts (3 BSc and 2 MSc cohorts) attending a university situated in the North East of England. Purposive sampling was adopted, which is a deliberate non-random method aimed at a sample with particular characteristics (Plowright, 2011; Robson, 2011). The cohort selected ensured the participants had completed year 1 of study and were scheduled to complete their degree programme within the period of the study. It was also a large enough group to allow further dimensional sampling for more specific characteristics (Robson, 2011). The sampling strategy is illustrated in Figure 2.2.

Figure 2.1: Diagrammatic representation of the multiphase qualitative research design

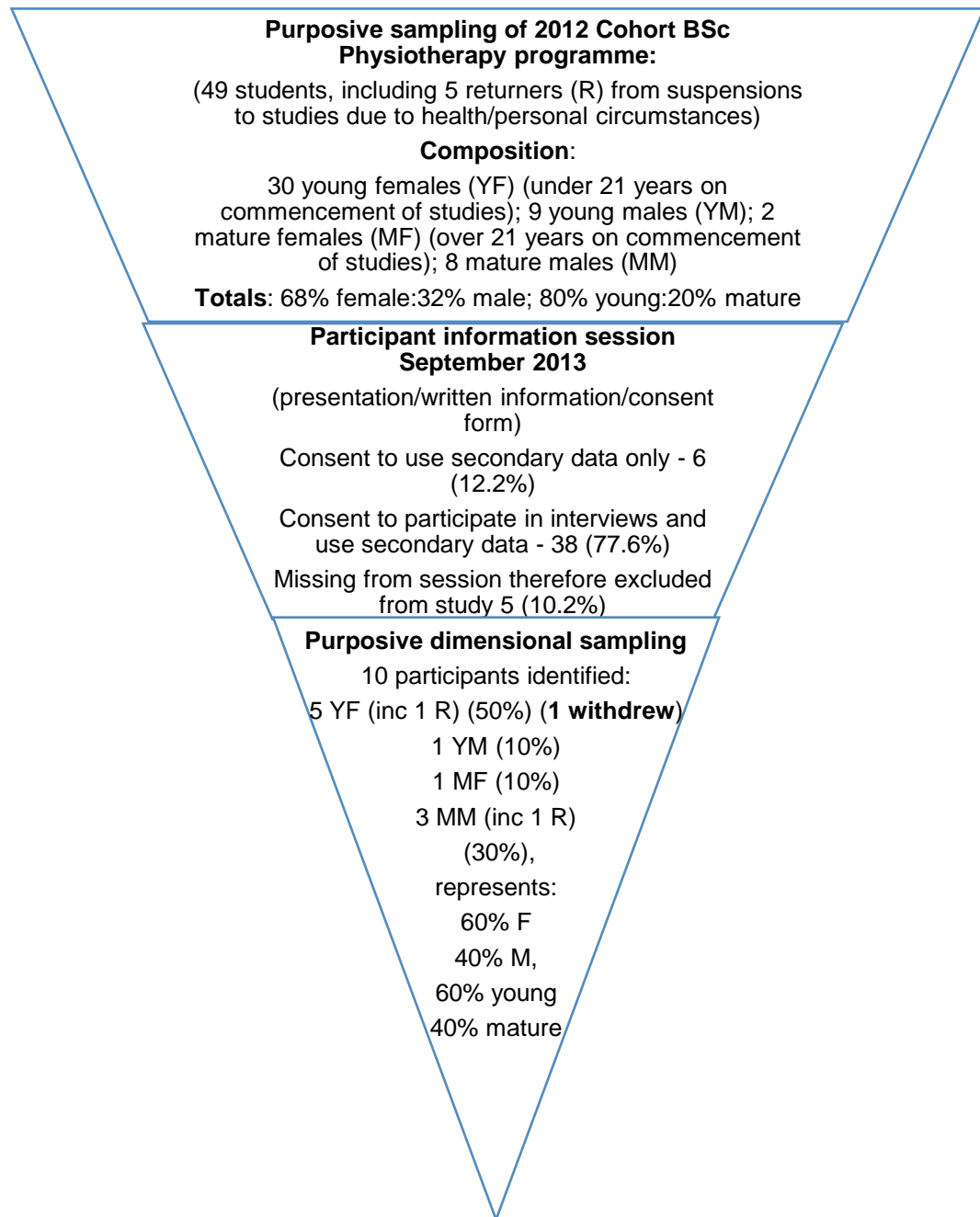


A study information session was arranged at the University that consisted of an oral presentation about the research subject and purpose. In addition, an information sheet was also distributed which is detailed in Appendix 2. Students were requested to read the information sheet; encouraged to ask questions; and finally consider consenting to take part. Recruitment was two-fold; initially, the whole cohort was approached to gain informed consent to use secondary admissions data including biographical data. This included details of prior academic achievement and indications of personal characteristics from the original application form, including the personal statement, references and the interview performance form. Additional academic and clinical practice progression data was to be collected.

Of the cohorts 49 students (which included 5 returners from suspensions to studies due to health/personal circumstances) 5 did not attend the information session (including 1 returner) and were excluded from the study. Following the information/recruitment session 44 students agreed to take part. 38 students consented to the use of their secondary data and indicated their willingness to participate in individual face-to-face semi-structured interviews (including 3 returners). The remaining 6 students (including 1 returner) agreed to their secondary data being used, but they did not wish to participate in the interviews. Of the 38 students consenting to both facets of the study, 10 students were recruited using a purposive dimensional sampling method (Robson, 2011, p. 275).

The initial purposive sampling was to ensure an appropriate target population was recruited to meet the broad requirements of the study within the period. The purposive dimensional sampling approach is an extension of the purposive approach that defines specific dimensions in the target population deemed potentially important to the study. This was used to capture specific aspects of diversity of the target population (Carter & Lubinsky, 2016, p.92; Robson, 2011, p. 275). The intention was to ensure the sample was able to fulfil the aims of the study to explore the phenomenon, gain understanding and make interpretations. Adopting a dimensional approach helped avoid potential selection bias in which specific phenomena were missed or their relative importance varied between the populations dimensions (DePoy & Gitlin, 2016).

**Figure 2.2: Purposive and dimensional sampling strategy**



The process required each member of the target population be allocated a code. These codes (no names) were separated into four envelopes identifying specific categories: young females; young males; mature females; and mature males (Polgar & Thomas, 2013; Neal, 2009). An independent colleague (not in the immediate physiotherapy team) drew out ten codes as a proportion of the four cohort characteristics; this is detailed in the sample matrix, Table 2.2 (Polgar & Thomas, 2013; Neal, 2009). In the university context, the term 'young' corresponds to a student under 21 years of age at the point of programme entry. Mature refers to students over 21 years of age at point of entry. Returners were



students who had stepped off the programme for personal or health reasons and were stepping back on to recommence their studies.

**Table 2.2: Sample matrix of the 38 students consenting to both facets of the study.**

<b>Cohort Characteristics</b>	<b>Female (65.8%)</b>	<b>Male (34.2%)</b>
<b>Young (under 21 years on entry)</b>	<b>No. = 24</b> (Inc. 1 returner) (63.2%)	<b>No. = 5</b> (Inc. 1 returner) (13.2%)
<b>Purposive dimensional sample</b>	<b>No. = 5</b> (Inc. 1 returner) (50%) 1 withdrawal = <b>4 (Inc. 1 returner) (44.5%)</b>	<b>No. = 1</b> (10%) ( <b>11.1%</b> )
<b>Mature (21 years plus on entry)</b>	<b>No. = 1</b> (2.6%)	<b>No. = 8</b> (Inc. 1 returner) (21%)
<b>Purposive dimensional sample</b>	<b>No. = 1</b> (10%) ( <b>11.1%</b> )	<b>No. = 3</b> (Inc. 1 returner) (30%) ( <b>33.3%</b> )

Once recruitment was completed, the participants were again contacted to confirm they were still willing to participate in the three phases of interviews. One young female decided, on reflection, to withdraw from the interviews, but consented to secondary data use; the other nine all consented. It was decided not to select a replacement as there was still an adequate representation of the ‘young female’ category and the qualitative methodology was not reliant on a critical number for statistical power and generalisability of results.

#### **2.4.4: Data collection**

##### **2.4.4.1: Semi-structured interviews**

Once the nine participants were identified, they were contacted separately to arrange a mutually convenient time for the phase one interview. These were scheduled to take place in a private interview room at the University, as this was deemed most convenient to both parties. The phase one interviews took place in December/January 2013/2014. Several days before the scheduled interview the participants were sent a ‘phase one pictorial time-line diagram’ (see Appendix 4) which acted as an interview schedule. It identified the period the interview was to cover and the aspect of their learning journey the interview sought to explore. This was from the point they identified physiotherapy as their preferred career, through to completion of year 1. The diagram was separated into two halves by a faint

broken line to denote positive experiences/influences (space above the line) and negative experiences/influences (space below the line). It was optional, rather than compulsory to utilise the time-line diagram, but it ensured each participant understood the parameters of the interview in advance. Thus, it furnished them the opportunity to consider which aspects of their experiences they were willing to share. A similar diagram was sent out before each interview phase.

Each interview was on a one-to-one, face-to-face basis. The interview room had a table and two chairs and a notice was placed outside to identify an interview was taking place and should not be disturbed. The interviews were recorded, using a digital voice recorder and small microphone (students had previously consented to this), which was placed on the table approximately half way between interviewer and interviewee. The interviewer and interviewees knew each other, as the researcher was also one of their lecturers. As a relatively small course (cohort numbers), the staff and students get to know each other well and, generally, develop good professional relationships. The researcher was not a Guidance Tutor (allocated personal tutor providing mentoring and pastoral support for the duration of their degree) for students from this cohort. This provided an additional reason for recruiting from this particular year group. Because, along with fulfilling the research objectives within the period, the researcher had not been involved in a pastoral role that may have created difficulties for students feeling the researcher had prior knowledge of a personal nature. This gave them confidence they could divulge as much or as little personal information as they felt comfortable with as the researcher was unaware of their personal circumstances. The existing professional relationship between the researcher and participants contributed significantly to a relaxed atmosphere and reduced the requirement for prolonged introductions.

The conduct of the interviews was through a semi-structured approach (See Figure 2.1). The timespan, or chronology and life focus, or broad theme was established by the pre-interview pictorial time-line information (Appendix 4). The participants were encouraged to recount their learning journey during this period, with as little interruption from the researcher as possible. This was to allow the participants to give a free and full recitation of their experiences on the period of interest. The interviewer's role, through active listening and facilitatory questioning, was to encourage the participant to recount, as fully as possible, their

experiences and where appropriate stimulate discussion to add depth to the account. It was important that the researcher avoided excessively directing the recitation, but provided opportunities for elaboration through simple reflective questions, for example, “*so what happened?*”, “*how did you feel about that?*” (Elliott, 2005, p.32). This process was repeated with a second interview picking up the experiences of year 2 to year 3. These took place between December and January 2014/2015. A third interview, explored year 3 to graduation and overview reflections of the whole programme and their preparation for their future role as a HSCP, took place in June 2015.

The audio tapes were initially transcribed (anonymity ensured by use of identifying codes) by an individual external to the project, with audio-typing skills. The researcher then amended the typed transcripts correcting any errors to technical/medical language that the participants would identify as inaccuracies in their story. These versions of the transcripts were sent to each participant at least one week before the next phase of interviewing to confirm their accord with the material presented and to remind them of the content of the previous interview that was to be built on in the next phase. At the beginning of phase 2 and 3 interviews participants were asked if they felt their experiences had been represented accurately and if they wished to amend (add or sub-tract) anything. No participant indicated misrepresentation or requested an alteration in this study.

#### **2.4.4.2: Secondary Data**

A range of secondary data was collected including: Entry biographical and recruitment data, academic progression data and formative feedback from placement performance assessments. The purpose of utilising the participant secondary data was to add richness in interpreting the impact of identified personal characteristics identified through the interview process. This data was conceptualised as a broad indicator of the relative smoothness (defined as the absence of negative academic, placement or personal issues); or challenge (defined as the presence of negative academic, placement or personal issues) of the students journeys through the programme. Additionally, it was conceived as providing evidence of a relationship between personal factors and positive or negative progress along the learning journey. In the context of this study the use of secondary student data was qualitative rather than quantitative in nature; to triangulate with interview data extracts providing both richness and cogency to the

interpretations as to why some students' journeys were smooth or problem-free, whilst others were challenged.

#### **2.4.5: Data analysis**

Data analysis started during the data collection process (interviews), it being impossible not to think about what was said during the interviews. The Framework approach was used to facilitate data management and analysis as it a frequently used tool to analyse semi-structured interviews (Gale *et al.*, 2013). It allows specific questions to be addressed and is both systematic and comprehensive, thus enhancing credibility because of its transparency (see Figure 2.3) (Ritchie *et al.*, 2014). Framework allows pre-determined themes and *a priori* influences, but its flexibility permits new themes to be generated through a dynamic process of data management for thematic analysis, beginning with 'familiarisation'; leading to a final phase of abstraction and interpretation (Ritchie *et al.*, 2014). The paper system approach adopted throughout the data handling and analysis (as opposed to electronic data management via NVivo, for example) was laborious, but did allow the researcher to become immersed in the data (Pope, Ziebland & Mays, 2000).

It is important to recognise transcripts are not literal depictions of the participants' recitations. In representing the verbal offerings in a written form, the inclusion of grammar and punctuation and the loss, or oversimplification of expression, tone, pace, volume or gesture may render a somewhat sterile version of the story because it is constructed from what the transcriber is able to hear (Hewitt, 2007, p.1153). This was not member checking in the accepted sense, but rather agreement that the raw data was a true reflection of what the participants had said about their experiences, with no additions or subtractions during the transcription process.

Thomas and Magilvy (2011) and Creswell and Miller (2000) suggest participants should have the chance to react to both the raw data and the interpretations soon after they occur. However, several authors are critical of this approach. They suggest, the fact the researcher synthesises, decontextualizes and abstracts the raw data means that individual participants have no reason to expect to be able to recognise themselves explicitly in the final interpretation. In attempting to be responsive to individual participants concerns, could result in interpretations

becoming more descriptive. This, in turn could actually invalidate the work by being too close to the raw data (Baillie, 2015; Flick, 2015, p.237; Houghton *et al.*, 2013; Bryman, 2008, p. 378; Holloway, 2005, p.277; Morse *et al.*, 2002). The latter view was the one utilised throughout this study to ensure accurate representation of the raw data. Transcript checking was incorporated into the previously agreed contact points in the study to avoid the accusation of undue harassment of participants. Although there could be a criticism of the length of time between interview and review of the transcript, and the potential impact of memory (discussed in 4.5 strengths and limitations).

#### **2.4.5.1: Data management and analysis – stage one - familiarisation**

Familiarisation (Figure 2.3) is a phase of immersion in the collected data and an explicit aspect of analysis, through selection and summary of what the participants say of relevance to the research focus. The audio recordings were listened to multiple times with and without the transcript allowing the researcher to become familiar with the flow and content of each interview. During this stage topics and subjects of interest and relevance to the focus of the study, were labelled under broad headings. These had been identified by *a priori* concepts developed in the early planning and literature review phase, and during the interviews themselves. They were maintained in a chronological order in an attempt to retain the context of the learning journeys.

#### **2.4.5.2: Stage two - thematic framework**

Stage two of Framework (Figure 2.3) was the construction of an initial thematic framework (Ritchie *et al.*, 2014). This is a period of refining and sorting, a process facilitated by the utilisation of the rapid identification of themes from audio recordings (RITA) method of data analysis (Neal *et al.*, 2015). RITA both overlapped and complemented the Framework method with its own five-step approach, which is incorporated and summarised in Figure 2.3. RITA (step one) acknowledged the *a priori* focus of the study; which developed through step two with the identification of themes deduced from the foci and induced from the interviews. Step three was the creation of a coding form (Appendix 6) which was then used in step four to review and refine the themes by utilising them with a sample of the recordings. The final version of the form was then used to review the final transcripts.

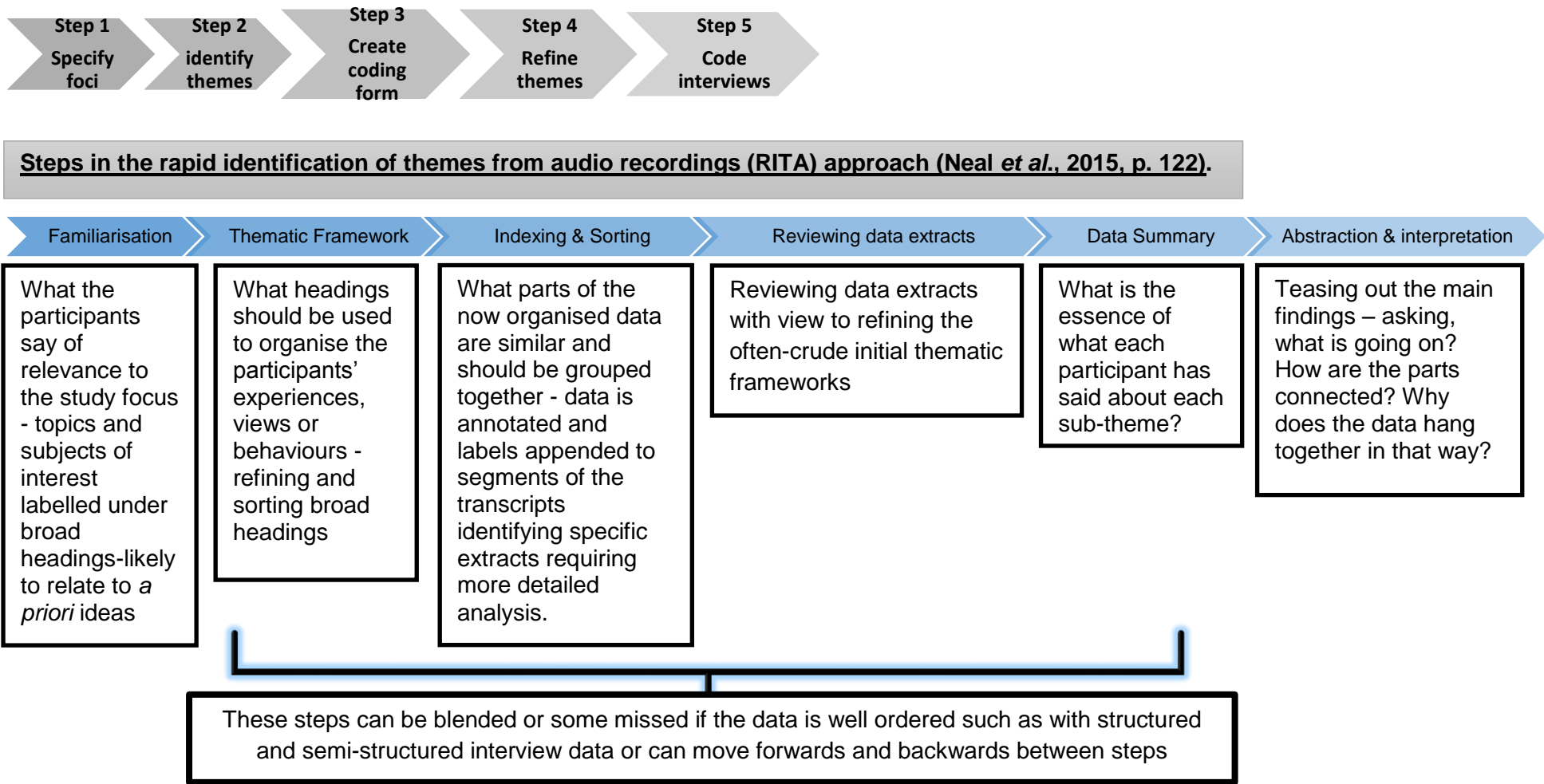
#### **2.4.5.3: Stage three- Indexing and sorting**

The 'indexing and sorting' stage of Framework (Figure 2.3) was the grouping of similar data extracts. Here main themes were ordered and labelled and labels appended to segments of the transcripts identifying specific data extracts requiring detailed analysis. In the context of this study stages two and three of Framework were blended. This is not uncommon when working with structured or, as in this instance, semi-structured interview data that is already well ordered (Ritchie *et al.*, 2014). A notable facet of the Framework analysis is the use of *a priori* themes as part of the thematic framework and reference for ongoing analysis. Thus, the aims of the study (individual participant personal characteristics) informed the key areas requiring attention (Ritchie & Spencer, 2002).

#### **2.4.5.4: Stage four – reviewing data extracts**

Stage four was a refining stage, in which the initial thematic frameworks already indexed and sorted were checked against the study aims and the *a priori* ideas. Thus, confirming personal characteristics were expressed through the reciting of personal experiences. Further, it challenged whether the data could be organised in other ways to produce more meaningful groupings (Ritchie *et al.*, 2014).

Figure 2.3: ‘Framework’ for data management and analysis (Ritchie *et al.*, 2014).



#### **2.4.5.5: Stage five – data summary and display**

The final stage of the Framework data management phase is 'data summary and display', previously termed 'charting' (Ritchie *et al.*, 2014; Ritchie & Spencer, 2002). This involved creating a matrix of data extracts for each phase, which summarised the data by participant, referred to as a case; and by each main theme and sub-theme. The systematic approach provided detailed familiarity with the raw data. This in turn provided transparency for how the data was managed analysed and interpreted (Ritchie *et al.*, 2014, p.282; Miles & Huberman, 1994, p.10). The data extracts used in the matrices were crafted dialogues in a manner similar to that described by Hammond, Cross and Moore (2016). Here, words deemed disruptive to the flow were omitted, notably redundant phrases such as "*kind of*", "*I think*", "*do you know what I mean*" (Hammond, Cross and Moore, 2016, p. 76). Additionally, stammered words, "*ums*", and "*errs*" were removed, whereas incomplete words were completed so long as it was clear what word was intended, if not it was removed.

#### **2.4.5.6: Stage six – Abstraction and interpretation**

The interpretation phase began through a further immersive process of looking for similar elements within the data and developing higher order themes. Once again, movement between each of the Framework stages kept the development of the final themes close to the raw data. This ensured both comprehensive coverage and utilisation of the data to avoid overlooking important aspects or relationships between phases, themes and data (Ritchie *et al.*, 2014; Miles & Huberman, 1994).

The particular words used by the participants and the content of their recitations both illustrate the conceived phenomenon and the meaning induced by the researcher's observations. This was handled sensitively so as not to distort the meaning of the rich detail present. It is achieved through exhaustive consideration of the data matrices and identifying which extracts are about the same thing. This process, termed 'Description' involved the detection of elements and dimensions within themes and subthemes within each phase (Ritchie *et al.*, 2014, p.284). It confirmed the presence of themes and subthemes generated by the data handling processes. However, it also enabled reordering or combining themes in preparation for/part of familiarisation of the next phase (Ritchie *et al.*, 2014, p. 310). The devising of categories is the movement from relatively descriptive



groupings towards more discriminative groupings where the researcher shifts from the language of the participants towards theoretical concepts or incorporating ideas garnered from the evidence-base.

Once again, Framework is not a linear or dogmatic process, but rather a systematic and transparent approach. The level of detailed analysis depends on the study objectives and the nature and clarity of the data gathered and presented in the matrices. In this study, the themes and subthemes were additionally categorised as positive, negative or neutral thus offering linkage between phenomena and secondary data. It also, provided a foundation to account for the observed patterns (Ritchie *et al.*, 2014, p. 331).

#### **2.4.6: Ethics**

##### **2.4.6.1: Ethics committee approval**

All research has the potential to raise ethical issues and that conducted with human participants may be viewed as a moral enterprise. Such an enterprise must balance the means (research conduct and the inherent potential for participant harm) with the ends (the desire to answer a question or solve a problem for the benefit of the many) (Bowling, 2014; Townsend, Cox & Li, 2010). Ethical guidelines and codes of practice emerged after the Second World War, for example the World Medical Association Declaration of Helsinki, 1964 (revised 2008). Much of the ethical guidance focuses on quantitative research. This may be linked to the mistaken belief qualitative research is unlikely to be harmful to participants (Richards & Schwartz, 2002, p.136). However, whilst these traditional guiding moral/ethical principles of autonomy, justice, beneficence and non-maleficence are at the heart of such guidance, they offer collectively recognised terminology that facilitates critical consideration of the nature of the researcher-participant relationship. The demand is for the researcher to be mindful of these protective measures to ensure the morality of their work and the methodological rigour with which it is conducted (Townsend, Cox & Li, 2010; Hewitt, 2007; Richards & Schwartz, 2002). The proposal for this study was submitted for scrutiny and consent from the University, Faculty Research Ethics Review Panel prior to commencement, with final approval granted (November 2013).

#### 2.4.6.2: Ethics – threats to autonomy

It is an important process to have confirmed a researcher's work has been scrutinised by impartial authorities and deemed unlikely to infringe participants' human rights. However, it is the actual conduct of the proposed research and the reflexivity of the researcher in the write-up that confirms the morality of the study. Autonomy is the capacity of the individual to *"think, decide, and act on the basis of a freely made decision"* (Townsend, Cox & Li, 2010, p.620) and is linked to two key conditions, 'liberty' (independence) and 'agency' (capacity for purposeful action) (Townsend, Cox & Li, 2010, p.621; Hewitt, 2007, p.1152).

The greatest perceived threat to autonomy in this study was to liberty. There was the potential that some participants may have felt coerced to agree to participate because of the power relationship between them and the researcher, who was also one of their lecturers (Townsend, Cox & Li, 2010). Such power relationships create potential challenges. They demand the researcher is explicitly seen to 'respect people' and establish their wishes in the context of the research being undertaken (Seedhouse, 2009, p.173). Educators are in a position of power and status, with some students possibly intimidated and thus allowing decisions/agreements to be imposed on them, however unwitting that imposition maybe (Seedhouse, 2009, p.173).

The researcher position is not simplistic. In the context of this study, the researcher may be viewed as both an 'insider' (Admissions Tutor; Lecturer, Guidance Tutor and Physiotherapist) and an 'outsider' (generation gap – timespan since researcher engaged with undergraduate study, experienced Physiotherapist – ex-clinical specialist and manager; and teacher rather than learner). Therefore, a potential power issue existed which had to be considered carefully. This was particularly important with respect to recruitment of student participants and interactions before, during and after the interviews. To reduce the potential for coercion, the researcher drew on the positive egalitarian relationships fostered on this programme between academic staff and students. Guidance Tutor informality was adopted when explaining the study and requirements.

This relationship could have led some to consent through an implicit sense of duty, a sense of fostering the goodwill of the lecturer, or not propagating their

displeasure, as a means of gaining some advantage on their learning journey. It is, however, somewhat paternalistic to presume students feel implicit pressure or an obligation to consent. Nevertheless, it is important to be aware of the possibility and build-in safeguards to the study (Townsend, Cox & Li, 2010). Further, there was a benefit to the target cohort being second years, as they had experienced the staff-student relationship for one year. Therefore they were able to appreciate the nature of the request and give due consideration to the presented information.

Informed consent is traditionally the means researchers address autonomy. However, in prolonged qualitative research, with ongoing or repeat contacts between the researcher and participants, this should be considered a process rather than a one off activity. In this study, informed consent was based on a verbal/visual presentation and written information about the nature of the research, the purpose, and the commitment required from the participants. It was presented without threat or inducement. There was also an explicit agreement that volunteers could change their minds, withdraw from the study and withdraw their consent to use secondary data at any time without fear of repercussions. A 24-hour cooling-off period between the presentation and completion of the consent form allowed the students the opportunity to read and digest the written information. Once the selection process had taken place, the interview volunteers were again contacted so they could verbally confirm consent. One individual did change their mind and withdrew from the interviews, but did consent to the continued use of their secondary data. The individuals who consented to being interviewed were re-contacted at each phase. Verbal consent was confirmed, both at the time of each invitation to attend the interview, and immediately before commencement of the interview. Thus, this study adopted a process approach to consent.

With respect to the 'agency' component of autonomy, initially there were limited concerns. Clearly, each individual had the capacity to understand why he or she had been approached, what the study was about, what it was for and what the commitment would be for him or her. However, in the conduct of the interviews the researcher had to be careful to avoid misrepresentation of the participants' experiences; and thus de-emphasise their priorities and motivations for agreeing

to share their experiences within this study. The students voice, absent from much of the related literature, had to be acknowledged but equally balanced with the research agenda. This was in part addressed by being explicit about the aims/purpose and scope of the study from the outset. It also helped that the chronological parameters of each interview were established at least one week before it occurred. Additionally, the participants were encouraged to present their experiences with as few interjections from the researcher as possible. This was to avoid overly constricting or gagging them, whilst still addressing the aims of the study by not letting them go too far off topic (Townsend, Cox & Li, 2010).

#### **2.4.6.3: Ethics – threats to participant identity**

Within any qualitative interview, something of the individuals' identity is revealed. In order to avoid dis-respect for the participants' autonomy and broad-stroke negative stereotyping it is incumbent on the researcher to acknowledge how their interpretation of the data is shaped by their own, personal, social and historical experiences (Richards & Schwartz, 2002). Therefore, the researcher's position in the project must also be acknowledged through unambiguous reflexivity (which has been attempted throughout this thesis) and participants are traditionally given the opportunity to comment on the data through member-checking exercises (Townsend, Cox & Li, 2010; Hewitt, 2007; Richards & Schwartz, 2002).

There are acknowledged challenges in using member checking ethically to avoid misrepresentation and in establishing the rigour of the study itself. However, the adoption of the systematic 'Framework' approach itself addresses issues of rigour by engaging in well-designed and conducted research, which is both systematic and transparent (Pope, Ziebland & Mays, 2000).

With respect to issue of anonymity, ground rules were set at the beginning of each interview that influential people/places along the learning journey should not be named, which was deemed good practice. However, occasionally in presenting their experiences the students forgot and named a member of staff or clinical location. In such instances, this was removed from the transcript to preserve anonymity of all.

#### 2.4.6.4: Ethics – avoiding harm

Bryman (2008, p. 118) states one of the key ethical questions that must be asked of any research is, “*is there harm to participants*”? This question is synonymous with the traditional ethical concepts of beneficence and non-maleficence, the obligation to provide benefits to the participants balanced against risks to them from participation (Townsend *et al.*, 2010; Hewitt, 2007). Richards and Schwartz (2002, p.137) actually see this as a fundamental aspect of all “*scientifically sound*” research, to have a clear value in the broad and narrow sense and reduce the risk of harm to participants. The concept of harm in qualitative research is often misapprehended, but is actually multifaceted. It includes, albeit rarely, physical and developmental harm; but more potentially psychological distress, anxiety, threats to self-esteem and undue influence on participants’ actions (Townsend *et al.*, 2010; Bryman, 2008; Hewitt, 2007; Richards & Schwartz, 2002).

It is impossible to identify the risk of causing harm categorically in advance. However, it is vital researchers anticipate the potential for creating emotional distress and establish measures or processes to prevent, or address it should it occur (Townsend *et al.*, 2010). With respect to this study, given the unpredictability of personal experiences stressful issues could not be ruled out, particularly in the event of a challenged learning journey. Such events/issues were managed by attentive listening, observation of non-verbal cues and general awareness of and responsiveness to individuals during interviews. The researcher attempted to be perceptive to traumatic aspects of the participants’ experiences and move from data collection mode to pastoral mode as required. Over the three phases of interviews only one interview was temporarily halted as the student became over-heated, which the researcher took as a stress sign. The student was offered a drink and opportunity to pause, take deep breaths with the door opened to allow a greater flow of air. The researcher also offered to terminate the interview. However, the participant insisted they had recovered after only a few minutes and indicated they wished to carry on, which they did without any further incident.

Several students had experienced personal traumas of varying degrees of severity, but momentous, or significant for each. They ranged from the apparently minor issues around homesickness, and challenges of looking after ones-self;

through to the birth of a child; personal illness, or illness and subsequent bereavement of a friend or family member. At no point did a participant become distressed to the point that the interview was suspended. When such significant life-events were raised, the researcher's awareness was heightened and a more pastoral approach was adopted. In these instances, active listening became more pronounced, indicating the issue had been heard and there was empathy, sympathy and admiration for how they had coped with the situation. In the more serious cases, the researcher confirmed at the end of the interview that appropriate support services were in place, such as guidance tutor involvement or Institutional Student Support Services. No student requested specific issues were to be removed from the analysis.

#### **2.4.6.5: Ethics – threat to the researcher**

The potential impact on the researcher of hearing about stressful or difficult issues was acknowledged. However, given the researchers many years' experience of clinical practice in long-term care situations, management and education (including pastoral care of guidance tutees) and dealing with difficult situations, the researcher felt equipped to cope with emerging issues. Additionally, the researcher was prepared for professional issues to manifest during the recitations of experiences. This could include participants' discussing other members of staff (colleagues of the researcher, clinicians, or clinical placement areas) or the researcher being named. This was easily removed from the transcription and in the event, most occurrences were positive about the support received, or the enhanced motivation gained from a clinical experience. Where comments were more negative the researcher had to make a judgement about the implications for the student (or other students), the staff concerned, or the clinical area. There were no issues raised during the interviews that the researcher felt required discussion with either the study supervisor and/or the line manager to determine an appropriate course of action.

#### **2.4.6.6: Ethics – Justice**

Related to the concepts of beneficence and non-maleficence is the notion of 'justice', which relates to 'fairness', or what individuals deserve (Bowling & Ebrahim, 2005, p. 565). In this context, it was conceptualised as ethically sound research (Hewitt, 2007, Bowling & Ebrahim, 2005, p. 565). There was an attempt

to balance the benefits of participating in the research with the additional burdens participation created. Informal discussions before and after the interviews highlighted a consensus (with the exception of one participant who was lost from the study after phase one and did not take up the offer of an exit interview) of the value in reflecting on their learning journey. This was generally perceived as aiding their appreciation of personal development and reaffirming their course/career choice was the right one. This latter theme was one that emerged from the interviews and analysis thus confirming for the researcher that the participants did appreciate the value of participation.

Throughout the duration of the study, the researcher made every attempt to limit the burden of attendance by negotiating the interview times to coincide with relative lulls in programme workload. They were also arranged at days and times convenient to the participants, usually when they were attending university for other activities (sessions or library study). Each interview session was time limited to one hour, protractions were due to student's willingness to complete their recitation, or informally chat after the interview. This was viewed by the researcher as indicative of the positive relationship between researcher and participants' and reinforcing there was no duress in their recruitment.

The researcher-recognised threats to justice were particularly discernible with respect to anonymity and confidentiality. The participants were vulnerable to identification due to the institution location, programme and cohort that sampled. Further, the interview transcripts themselves naturally contain numerous clues to the participants' identity despite measures to address this, such as the use of complex codes of numbers and letters to denote the individual participant cases. Care was taken when selecting interview extracts to illustrate results/interpretations to balance the illustrative benefit with threats to anonymity and confidentiality. Here the act of synthesis, de-contextualisation and abstraction (synonymous with the pragmatic notion of abduction, which is the formulation of *"if" – "then"* (Morgan, 2014, p.29)) was intended to anonymise the individual. At the same time, it was imperative to retain the appreciation that the interpretations were truthful identifications of the personal characteristics of specific individuals, which is the ultimate focus of the study. Further, the recordings and transcripts were stored separately from the participants contact details and in secure facilities in line with the ethics procedures of the institution. Throughout the three phases of

interviews, participants were never named on tape, only referred to by their individual code.



## CHAPTER THREE: RESULTS

### 3.1: The sample

From a population of 49 students who entered the 2012 BSc Physiotherapy Programme a maximum variance sample of 10 were purposively selected. One individual subsequently withdrew leaving a sample of 9 participants. Table 3.1 illustrates the participant characteristics and shows the mean age of the sample was 27.7 years, with an age range of 20-49 years. The sample consisted of 5 females and 4 males, of which 2 males and a female were married with children. The participants had diverse mixture of entry pathways with a mean UCAS score of 416.2 (SD 119.3). Academic entry status was subdivided into standard entry, relating to UCAS tariff gained from A' levels/Irish/Scottish Highers/International Baccalaureate or prior degree studies; and non-standard entry, relating to Access; BTEC; Higher Education Foundation Course; and 'mixed entry' relating to a combination of standard and non-standard entry academic tariff. This indicated that 3 students accessed the programme through standard entry, 3 through mixed entry and 1 via a non-standard entry method. The married participants were all recruited from the local community, with all, but one, of the single students having moved to the area for their BSc programme.

**Table 3.1: Interview participant characteristics**

Case	sex	age	marital status	children	UCAS tariff on entry	Local
1	F	20	Single	No	550 (mixed entry)	Yes
2	M	49	Married	Yes	320, plus BEng 2.1 & MBA, Access (mixed entry)	Yes
3	M	31	Single	No	450, plus EU degree maths & physics-pass (standard entry)	No
4	F	18	Single	No	350 (standard entry)	No
5	F	18	Single	No	326 (standard entry)	No
6	F	20	Single	No	420 (mixed entry)	No
7	F	39	Married	Yes	320 Access (non-standard entry)	Yes
8	M	18	Single	No	350 (standard entry)	No
9	M	37	Married	Yes	660 (non-standard entry)	Yes
	<b>Ratio 5F:4M</b>	<b>27.7 years</b>	<b>Ratio 6S:3M</b>	<b>Ratio 6N:3Y</b>	<b>mean 416.2 (SD 119.3)</b>	<b>Ratio 3Y:5N</b>

### **3.2: Secondary data analysis of the participant-learning journey**

Secondary data was collected to aid understanding of challenges encountered by individual participants through their learning journeys. This included module performance data, overall grade point average (GPA) for each year, and clinical educator formative feedback. This data is presented visually for each participant in appendix 9. It should be noted that Cases 1 and 2 were 'returners', individuals who had returned to the programme following a period of suspended studies due to personal/health circumstances. Therefore, year one-module codes are different from the other participants, as the curriculum had been revalidated during their period of absence. Table 3.2 compares the academic degree performance of the study participants with the cohort consenting to the use of their secondary data. This indicates the study participants' performance reflected that of the cohort and no difference in potential to succeed between the various modes of academic entry was detected.

With respect to the challenge of the learning journey, only Case 3 could be said to have experienced a relatively untroubled journey. They demonstrated outstanding performance both academically and on placement, and achieved a first class degree. However, a close family member's diagnosis with a terminal illness could have negatively affected their year 3, semester 2 performance. Although, by this stage there was only one assessment and one placement to complete, therefore this negative factor was less likely to influence overall performance. Cases 4 and 6 both had relatively untroubled journeys, although not without hurdles to overcome. Case 4 was extremely homesick in semester 1, year 1 which negatively impacted on their settling into the City and the course. Additionally, this individual became ill during the first year 2 clinical placement and perceived a negative relationship with their educator, resulting in unsatisfactory placement experience. From then on, they progressed academically and through placement without negative comment to achieve a 2:1-degree. Case 6 also experienced prolonged ill health immediately following their first placement in year 1. This negatively affected preparation for the January exam period. However, year 2 and 3 were trouble-free although the 2:1-degree classification did incorporate elements of year 2 (their best academic performance year) permissible in the assessment regulations of the University.

For Case 8 the learning journey was somewhat challenged by several negative factors. Year 1 was essentially smooth, but failure of an early year 2 module identified a possible lack of maturity and certainly a lack of confidence. Year 3 started well but personal circumstances emerged in semester 2. The normally utilised support network was threatened, resulting in severe stress. Ironically, their average academic performance for year 3 was their best throughout the journey and resulted in the achievement of a 2:1-classification.

Cases 1, 2, 5, 7 and 9 all experienced challenged learning journeys. Case 1's personal health issues began at the very end of year 1 towards the end of placement (CP2). Academically and clinically, they performed quite well, achieving their best GPA of 60. They returned for year 2, but by April (2013) it became apparent that on-going health problems demanded a suspension of studies. They therefore restarted year 2 with a new cohort in September 2013. The failure of one module that year was mitigated by having personal extenuating circumstances (PEC) accepted. At the re-sit, they achieved the full potential mark (rather than a capped pass). Another brief episode of ill health occurred during the elective placement (CP5); but they were able to enter year 3 having appeared to manage the health issues. Unfortunately, a significant bereavement in second semester resulted in delay in completing three module assessments and the final placement, CP7. However, they were ultimately successful graduating with a 2:2-classification.

Case 2 struggled both academically and clinically achieving a GPA of 47 for year 1. Although they gained generally positive formative feedback from placement (CP1 & 2) there were suggestions that their background knowledge was limited and they were struggling to identify patients clinical problems. Their first attempt at year 2 resulted in a GPA of 18, although they suspended studies (February 2013) due to personal/health issues before all academic assessments had been attempted. However, serious concerns about knowledge and ability to learn were raised during placement (CP3). They returned to restart year 2 with a new cohort in September 2013 and completed the year achieving a GPA of 34. They gained positive feedback for their interpersonal skills with patients. However, their apparent lack of knowledge, ability to make theory-practice links and requirement for high levels of support resulted in their leaving the Programme with a Certificate in Higher Education.

Case 5, although British lived with their mother in another country. They were very homesick throughout year 1 and this remained an underlying issue in all three years. Apart from the occasional module, they struggled academically throughout the programme. They had to re-sit two modules in year 1, achieving a GPA of 47, although clinical feedback was positive with respect to communication skills and professionalism throughout the programme. Semester 1 of year 2 was marred by the illness and death of a close family friend and several weeks later by the death of a close relative. This resulted in delays to three Semester 1 assessments. CP3 was a very poor clinical experience in which they had a negative relationship with their educator. This led to a re-evaluation of whether they should continue with their studies. CP4 countered that negative experience completely leading to the confirmation they wished to continue on the programme. By the middle of semester 1, year 3 they had caught up with all outstanding module assessments. However, in semester 2 another close relative died (end of May) adding to the emotional stress at that time. They continued to perform well on placement but academically their GPA remained in the 40's resulting in a third class degree. This participant was the first in the cohort to secure a Band 5 physiotherapy post.

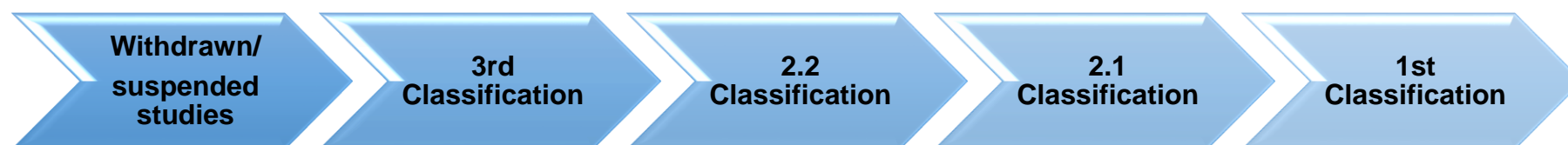
Case 7 was another mature student who was required to continue working (part-time) to meet mortgage payments and family expenditure. Like Case 2, they struggled to integrate with a peer study group all through the Programme. In semester 2 of year 1, they experienced two bereavements in quick succession, which possibly contributed to the failure of one module. Throughout the Programme, they consistently achieved GPA's in the 50's. However, they gained very positive formative feedback from placement. They graduated with a 2:2- classification.

Case 9 settled quickly and performed at just above average level, with GPA never falling below 60 throughout the Programme. In semester 2 of year 1 a close family member's protracted illness was diagnosed as terminal and they died half way through the semester. The participant did not use this as an excuse. Rather, it was the trigger to seek guidance from their personal tutor, work more on the theoretical aspects of the semester 2 modules, and catch-up with practical aspects when possible. Clinical placement feedback throughout was complementary particular with respect to theoretical knowledge, communication skills and professionalism. In semester 2 of year 2, the birth of their second child (first one

was under 2 years of age) added challenges to their ability to study at home. They achieved a 2.1-degree classification.

The progression data was collected as each phase of interviews was concluded. However, it was not analysed and related to the interview data until conclusion of the interview phases, so as not to influence questioning. It is primarily descriptive data providing appreciation of the relative smoothness or challenge of the experienced learning journey, as defined on page 50. Table 3.2 illustrates the extent the participants reflected the full cohort, demonstrating their representativeness.

**Table 3.2: Comparing the performance journey of study participants with cohort**



<b>Participants (9)</b>	Case 2 (MM-49yrs) (mixed entry)	Case 5 (YF-18yrs) (standard entry)	Case 1 (YF-20yrs) (mixed entry) Case 7 (MF-39yrs) (non-standard entry)	Case 4 (YF-18yrs) (standard entry) Case 6 (YF-20yrs) (mixed entry) Case 8 (YM-18yrs) (standard entry) Case 9 (MM-37yrs) (non-standard entry)	Case 3 (MM-31yrs) (standard entry)
<b>Cohort Young Females (24)</b>	3	0	4	14	3
<b>Cohort Young Males (5)</b>	1	0	2	2	0
<b>Cohort Mature Females (1)</b>	0	0	0	1	0
<b>Cohort Mature Males (5)</b>	0	0	1	2	2
<b>Totals (44)</b>	<b>5</b>	<b>1</b>	<b>9</b>	<b>23</b>	<b>6</b>

### **3.3: Phase 1: Contemplation of physiotherapy as a career to completion of year 1**

#### **3.3.1: Familiarisation**

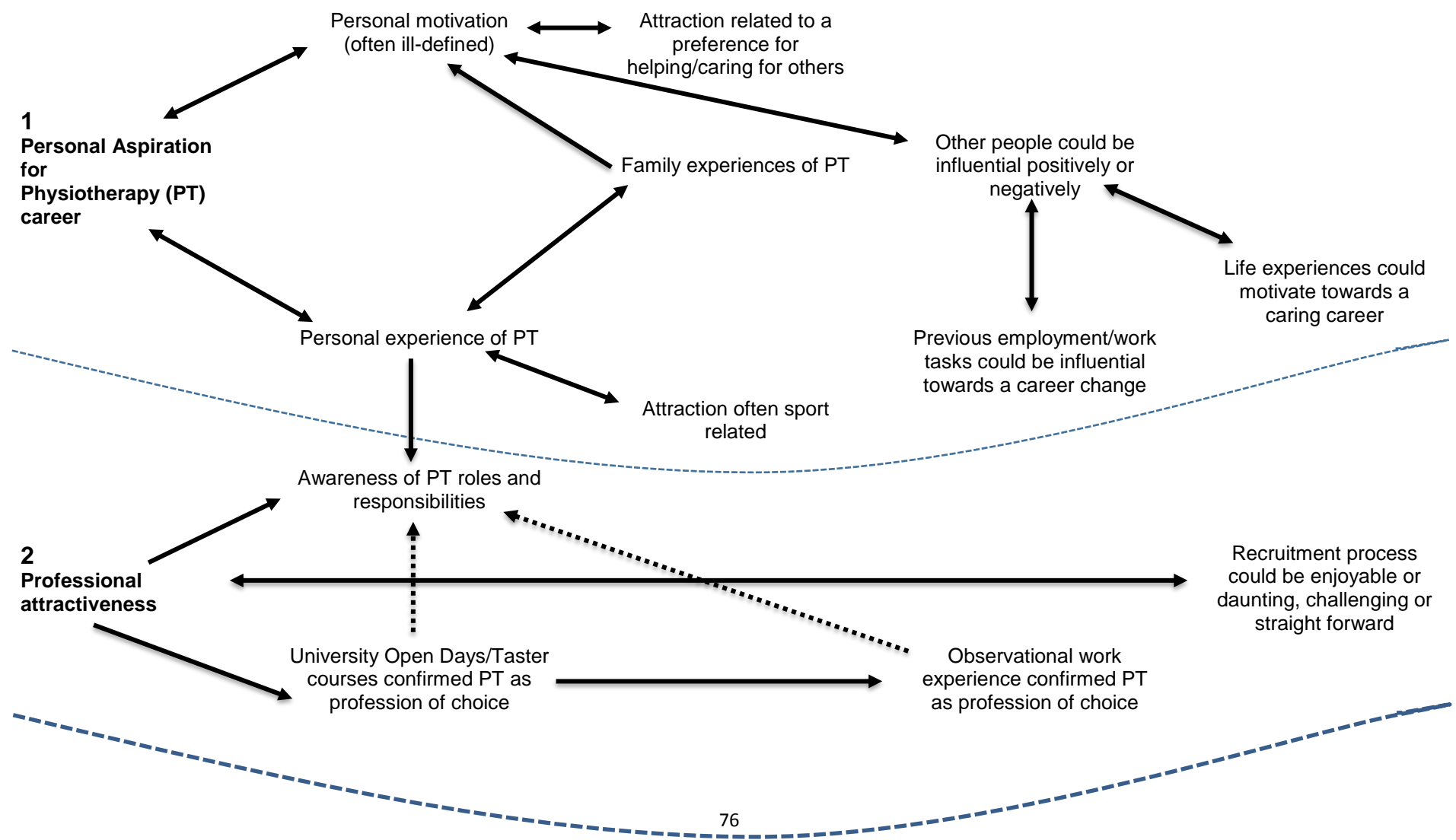
Familiarisation was a time-consuming but inductive process requiring repeated reading of the transcripts and listening to the audio recordings. This allowed the inclusion of contextual notes, or incomplete or missed words could be added. Figure 3.1 illustrates the initial groupings of data that helped explain the participants early learning journey from conceptualisation through to the end of year one.

Figure 3.2, box 1a shows the *a priori* interest areas related to the particular professional role the study intended to explore. Figure 3.2, box 1b shows the emergent themes from the data analysis, illustrated in Figure 3.1. These were used as the basis for the thematic framework shown in box 2 (Figure 3.2). The themes emerged during the analysis as chronological episodes through the learning journey. However, there was a degree of overlapping in several areas. For example, individual motivation towards physiotherapy as a career. Although often poorly described, motivation appeared related to the theme of caring, helping, or doing something worthwhile, rather than a well-paid job with promotion prospects.

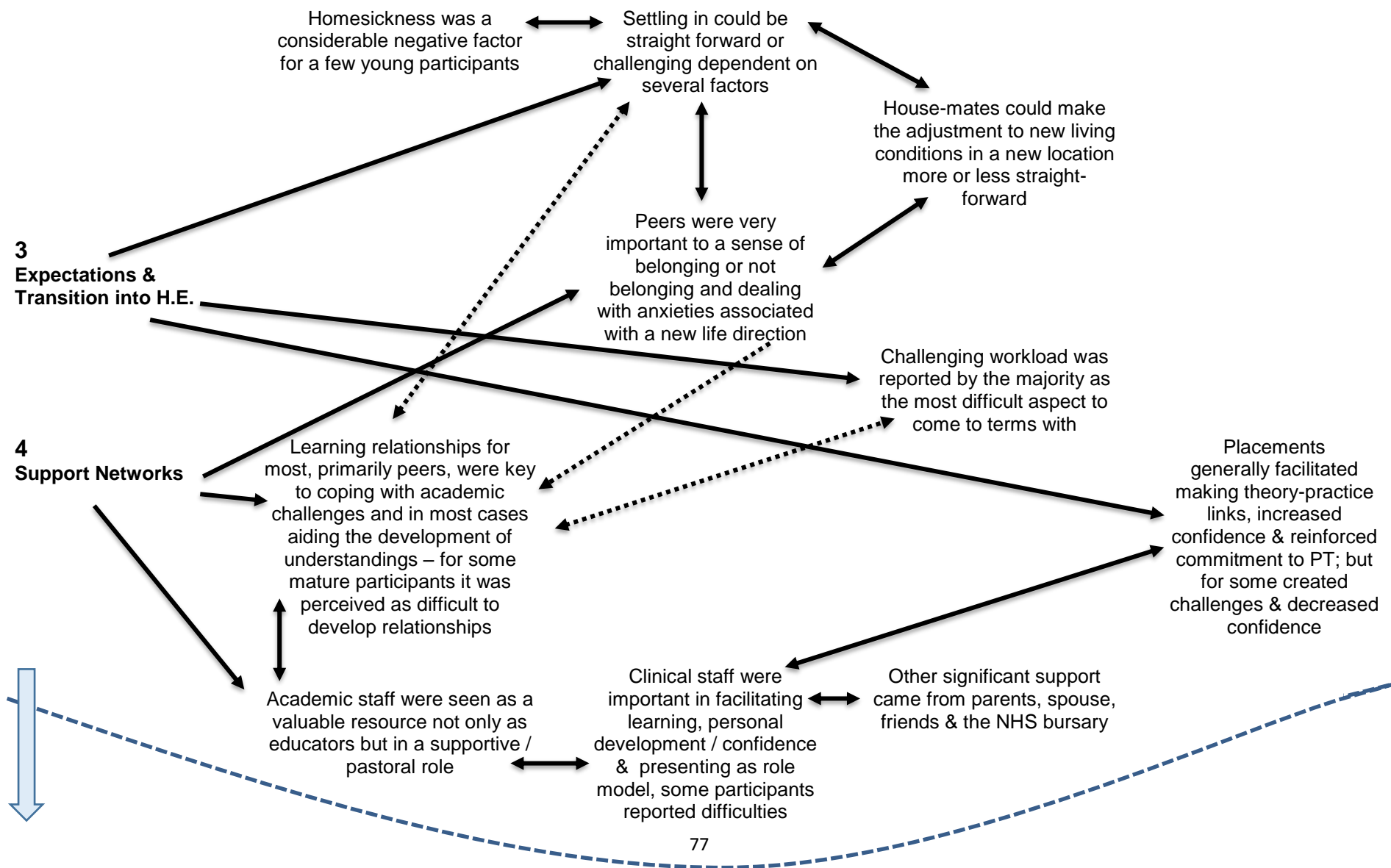
Another area of overlap was the importance of interpersonal relationships. These included the notion of others who introduced physiotherapy as a career option, to individuals who helped the participant settle into higher education. It also included more focused learning relationships, acknowledging those providing support through academic and placement challenges, or being influential in personal and professional development. These observations suggested that personal characteristics, such as a caring demeanour and interpersonal skills were in evidence within the recitations of the participants learning journeys.

One emergent factor was in the differences in the learning journey between young and mature participants. Settling-in, developing learning relationships and making use of a wider support network was more challenging for at least two of the four mature participants. Whereas homesickness was a negative factor for several of the young participants.

Figure 3.1: Familiarisation with phase 1 transcripts







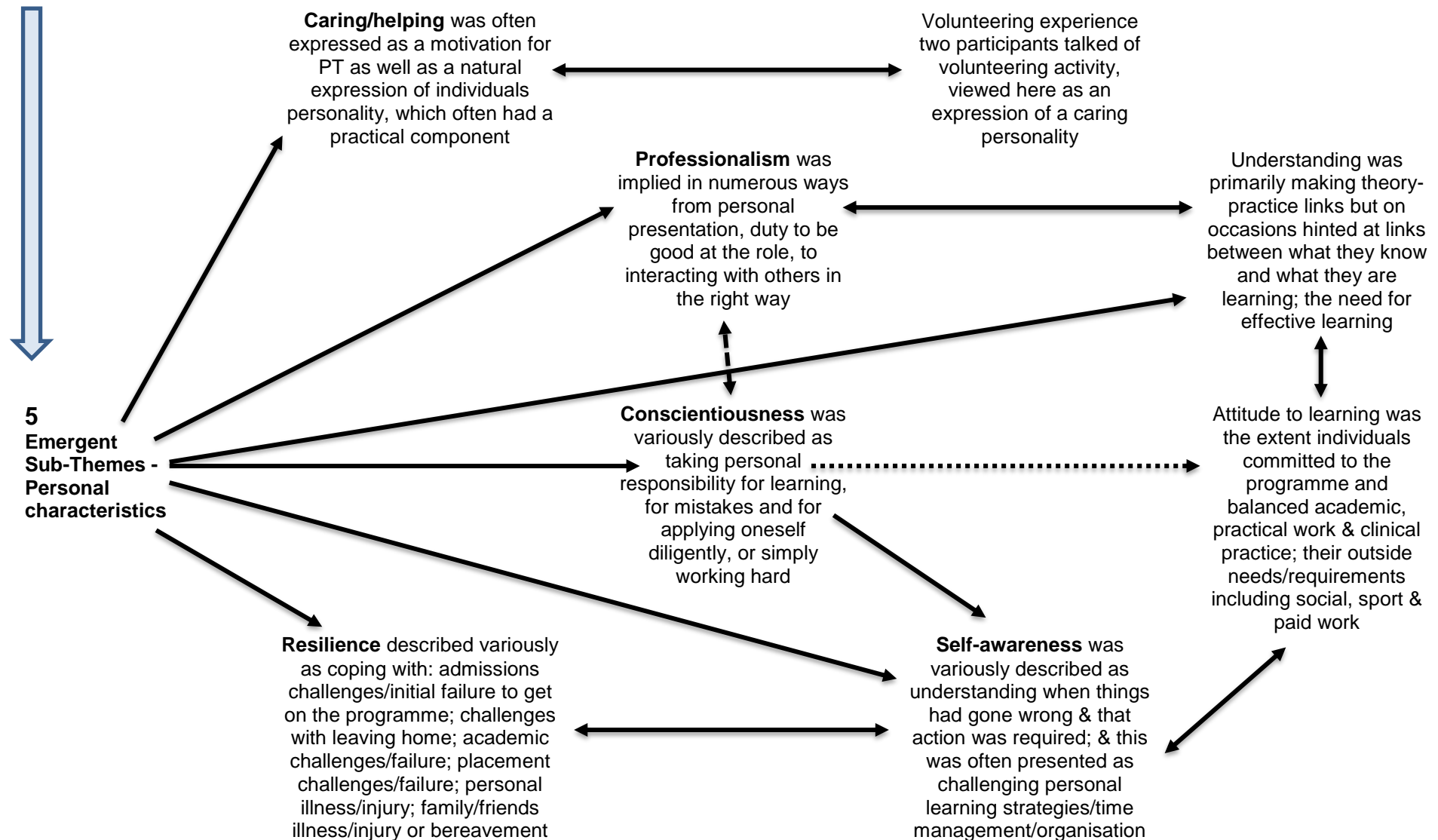
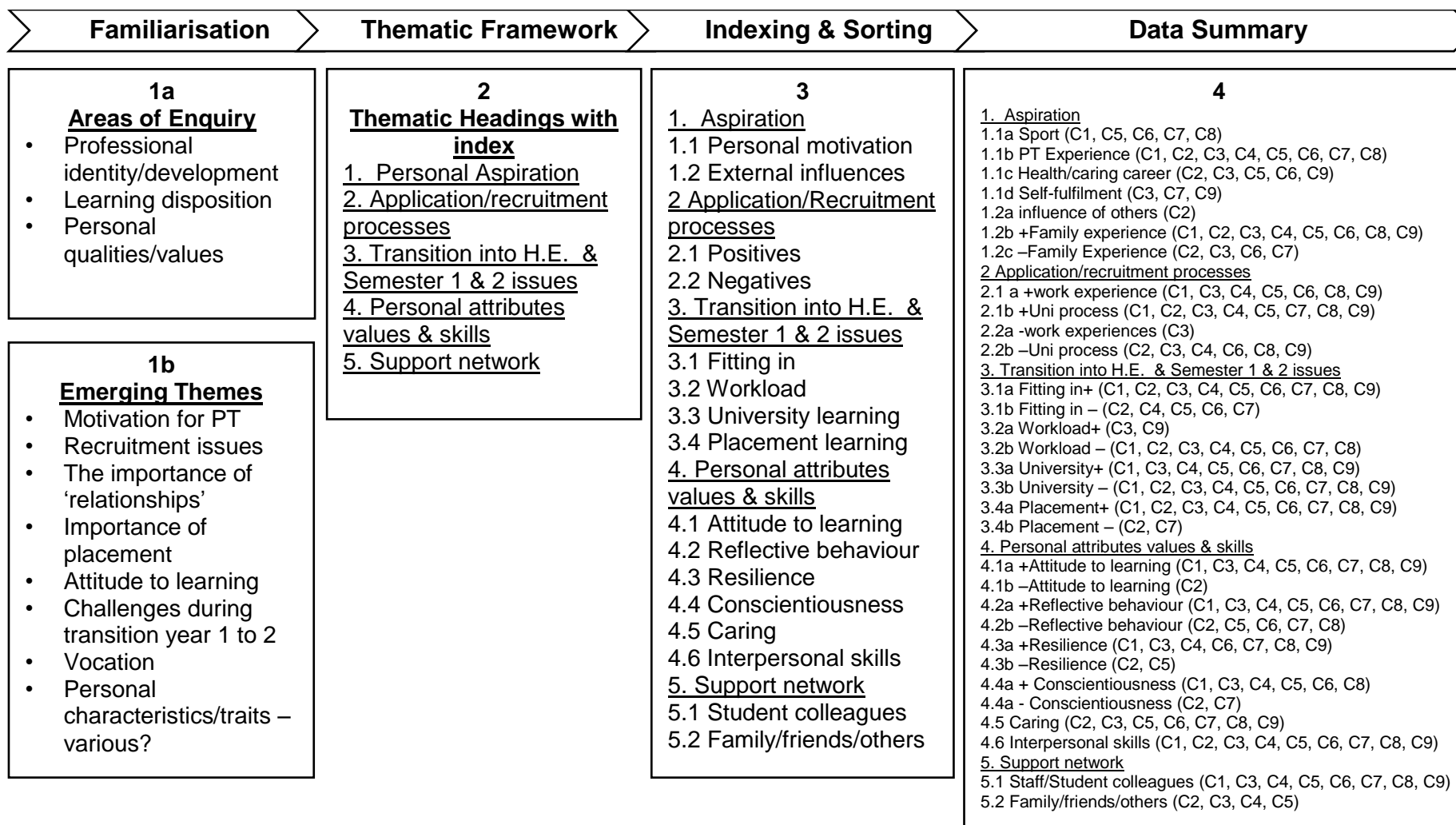


Figure 3.2: Example of the development of the thematic framework from Phase 1 Interview data.



### **3.3.2: Thematic Framework (incorporating Indexing, sorting and data summary)**

The familiarisation process (Figure 3.1) led to the formulation of five emerging themes (see Figure 3.2, box 2) that were used as the thematic framework and the initial index (Figure 3.2, box 3) to map data. The indexing process sought to label, sort and organise the data into themes. This was an intuitive process due to the data being reasonably well ordered, chronological and covering the similar experiences for each participant. However, the process still highlighted a richness in the data, as the personal experiences digressed down avenues of personal interest for the participants. This, in turn, led to emerging themes for which additional indexing was required.

This thematic framework identified notable chronological events during which personal characteristics emerged. Although the Framework approach would appear to the uninitiated to be a linear process, starting with ‘familiarisation’, leading to ‘data summary’ (box 4), in reality it is more cyclical, with toing and froing between the stages to eventually develop the final thematic framework.

Figure 3.2 (box 4) shows what each participant said relating to each of the themes by the production of a data matrix. This figure (box 4) identifies the participant or case producing data extract/s relating to a specific sub-theme. As data analysis progressed, it became evident, that in an attempt to avoid excluding data or themes that may be important, a significantly large data matrix was produced from phase 1. This inhibited primary data reduction and required a refocusing only on key influences and personal characteristics emerging from the participants experiences of the chronological episodes identified as primary themes. Figure 3.3 represents an example of one theme and some of the related sub-themes that were indexed in this initial construction of the thematic framework. Data extracts are presented for Case 1, with data extract codes presented and an explanation of how to interpret each code. The coding aids identification of the extract from the transcript by section and line; and identifies the extract as positive, negative or neutral (either positive or negative, or both). The secondary data played no part in the analysis at this stage.

**Figure 3.3: Example of data summary and display matrix from phase 1.**

	1. Aspiration for professional identity		
Participants	1.1 Personal motivation	1.2 External influences	1.3 Previous employment
<b>Case 1</b>  <div> <b>Data extract codes</b>  S = section, L = line;  Superscript + = broadly positive extract  Superscript - = broadly negative extract  Superscript 0 = a neutral extract,  neither positive nor negative or both. </div>	“...it was motivating in that I knew I wanted to be a physio...” (S6/L8 <sup>+</sup> )	“...there was family experience of hospital physio, mainly my granddad and not necessarily him getting particularly a lot of physio, but seeing people in his ward getting up and about, how it helped them, it helped him a little bit as well to maintain independence...” (S4/L4 <sup>+</sup> )	
<b>Case 2</b>	S5/L1 <sup>0</sup> ; S7/L5 <sup>+</sup> ; S11/L3 <sup>+</sup> ; S35/L1 <sup>-</sup>	S3/L1 <sup>0</sup>	S11/L5 <sup>0</sup>
<b>Case 3</b>	S4/L1 <sup>+</sup> ; S10/L3 <sup>+</sup> ; S12/L4 <sup>+</sup> ; S16/L2 <sup>+</sup> ; S40/L12 <sup>+</sup> ; S42/L9 <sup>+</sup> ; S46/L6 <sup>+</sup> ; S48/L6 <sup>+</sup> ; S50/L1 <sup>+</sup> ; S66/L1 <sup>+</sup> ; S78/L13 <sup>+</sup>	S6/L5 <sup>+</sup> ; S10/L1 <sup>+</sup> ; S12/L1 <sup>+</sup> ; S46/L1 <sup>+</sup> ; S48/L3 <sup>+</sup>	S6/L5 <sup>+</sup> ; S12/L7 <sup>+</sup>
<b>Case 4</b>	S5/L6 <sup>+</sup> ; S11/L6 <sup>+</sup> ; S13/L1 <sup>+</sup> ; S27/L2 <sup>+</sup> ; S39/L6 <sup>+</sup> ; S43/L9 <sup>+</sup> ; S45/L6 <sup>+</sup>	S5/L3 <sup>0</sup> ; S11/L1 <sup>+</sup> ; S17/L2 <sup>+</sup> ; S31/L1 <sup>+</sup>	
<b>Case 5</b>	S4/L14 <sup>+</sup> ; S4/33 <sup>+</sup> ; S8/L1 <sup>+</sup> ; S34/L1 <sup>+</sup>	S4/L3 <sup>+</sup> ; S4/34 <sup>+</sup>	
<b>Case 6</b>	S4/L8 <sup>+</sup> ; S8/L1 <sup>+</sup> ; S10/L2 <sup>+</sup> ; S34/L1 <sup>+</sup>	S4/L1 <sup>0</sup> ; S4/L8 <sup>+</sup> ; S4/L13 <sup>-</sup> ; S8/L1 <sup>+</sup> ; S10/L1 <sup>+</sup>	
<b>Case 7</b>	S4/L8 <sup>+</sup> ; S4/L13 <sup>0</sup> ; S4/L19 <sup>+</sup> ; S4/37 <sup>+</sup> ; S4/L92 <sup>+</sup> ; S16/L1 <sup>+</sup> ; S18/L4 <sup>+</sup>	S4/L2 <sup>+</sup> ; S4/L6 <sup>+</sup> ; S4/L94 <sup>-</sup>	S4/L34 <sup>+</sup> ; S4/L35 <sup>-</sup> ; S12/L9 <sup>+</sup>
<b>Case 8</b>	S4/L1 <sup>-</sup> ; S4/L7 <sup>+</sup> ; S4/L18 <sup>+</sup> ; S6/L15 <sup>+</sup> ; S6/L68 <sup>+</sup>	S4/L11 <sup>+</sup>	S6/L24 <sup>-</sup>
<b>Case 9</b>	S4/L9 <sup>+</sup> ; S4/L18 <sup>+</sup> ; S4/L30 <sup>+</sup> ; S6/L1 <sup>+</sup> ; S8/L9 <sup>+</sup> ; S24/L2 <sup>+</sup> ; S32/L1 <sup>0</sup> ; S32/L7 <sup>+</sup> ; S34/L1 <sup>+</sup>		S4/L2 <sup>0</sup> ; S4/L24 <sup>+</sup> ; S4/L26 <sup>+</sup> ; S6/L3 <sup>0</sup> ; S8/L1 <sup>+</sup>

### 3.3.2.1: Personal aspiration

Familiarisation identified a phase of contemplation about a future career, whether as the next life stage from education, or as a change of career direction due to some measure of aspiration or dissatisfaction. The identification with physiotherapy as a career direction was not always clearly expressed. However, at various stages of awareness, contemplation and exploration of the importance of others was very important. This included direct personal experience of having physiotherapy, and considering the experience and interaction with the therapist as “*positive*” or “*interesting*”. However, it also included family members having physiotherapy and the participants witnessing the benefit for their loved-one. Other individuals were also influential in instigating the participants’ personal aspiration by organising further investigations into the roles and responsibilities of the profession. This ranged from family members, friends of the family and acquaintances facilitating contacts with therapists or physiotherapy services. For those participants who did not have access to such contacts, it was often challenging to arrange an observational experience. However, the benefits of observational experience, plus university Open Days and Taster courses were significant in confirming physiotherapy as the career direction, even when initially they were torn between other professions:

*“...my mother was very badly afflicted with back pain... I saw the debilitating effects of muscular-skeletal pain, and then consequently she did get quite a lot of relief and was so much better...seeing the effect of physiotherapy, and she tried everything, as one does over 8 years of chronic pain...I saw the effects of pain and the positive effects of decent treatment...” (C3/S12/L4<sup>0</sup>).*

*“...I went to 3 open days, the information I got from there was positive in giving me the idea that I would be able to get on the course and the strengths you need and giving me information about what to expect and what would be to come...” (C9/S4/L26<sup>+</sup>).*

The attraction to physiotherapy as an identity appeared to have its foundation in the participants’ personal motivation towards helping, caring or making a difference. This was often quite complex, in that it was not just about making people better, but also involved the desire to prevent exacerbation of an individual’s condition. There was also an indication that some, possibly intuitively, recognised the psychosocial as well as the physical benefits of physiotherapy in improving quality of life and making people feel happier:

*“...with, my mum’s physio class I’ve seen how happy it can make them, even if it’s just socialising; how it’s maintained their level, rather than, if they hadn’t have gone to that class their mobility and function would drop a lot quicker, and it’s kept them on the straight and narrow...with my mum I have had to care for her since I was...6 or 7, so it’s given me an opportunity to care for people and see how I can help people and I coped...”*  
(C6/S8/L1+).

However, in one case both the motivation for the profession, and their investigation into it, appeared at odds with the other participants. The University’s physiotherapy recruitment strategy requires all applicants to demonstrate investigation into, as well as awareness of the profession, to be considered for interview. Therefore, it is assumed each participant had undertaken some investigation and exploration of the profession, which would have been explored at interview. In particular, the interview would have aimed to draw on specific personal experiences, ascertaining the extent of their awareness, and their understanding of the profession. Nevertheless, one participant (Case 2) interestingly spoke of complementary therapy positively and actually reported experiences of physiotherapy in negative terms:

*“I started about 8 or 9 years ago when I took my wife to a physiotherapist, she had a sore back...and this local physio he couldn’t tell us what was wrong but he said she had to come for treatment for 18 months; and I just could not comprehend that; and so I enrolled on a sports massage injury course and I thought that I could perhaps maintain her condition, because I wanted to find the cause of the problem, and that’s what started me into it...”* (C2/S3/L1<sup>0</sup>).

### **3.3.2.2: Professional attractiveness and the desire to belong**

The recruitment process was daunting and challenging for most participants. Two (cases 1 & 6) had previously been offered conditional places on a physiotherapy programme but were unable to take the place as they did not achieve the requisite academic grades. To access that place on the programme they had to defer their studies for a year, return to college to address the academic shortfall, and reapply the following year. Case 3 had only received rejections the year before embarking on this programme; and cases 7 & 9 were both working whilst undertaking part-time, evening education programmes. When Case 9 eventually identified that physiotherapy was the career he wanted to pursue, initially he had been attracted

to Social Work, he was required to return to college for a further year to achieve the entry qualifications, whilst continuing to work full-time.

These examples suggest the attraction to the profession was strong considering their perseverance in overcoming obstacles. The attractiveness of the profession appears to have motivated the participants to persevere, despite multiple rejections and the demands and challenges of the recruitment processes for a programme that is heavily oversubscribed. Resilience was clearly in evidence to enable participants to bounce back from disappointment (cases 1, 3 and 6) and manage the additional education demands whilst coping with paid employment (cases 7 and 9):

*“...I applied for physio and I got an offer, which was amazing...this is really what I want to do, but then I didn’t have the grades...so it was the worst day of my life, it was like everything’s over, “I’m not going to get to do physio, what am I going to do?” I spent all day in Clearing trying to get in and it wasn’t a nice experience at all...I decided to pick myself up and I went to a college open day...I decided to go do a health and social care diploma, I did that for 2 years at college...” (C6/S4/L20<sup>0</sup>).*

*“...while I was working I was doing night classes and I did quite well in them, so I got the marks I needed and I just thought, “go for what you want go for and if it doesn’t work out well it’s not meant to be”; and I think it was probably my last chance to do that” (C7/S4/L20<sup>0</sup>).*

*“...I looked into what I needed to get onto the course so I knew I needed to do another HEFC which was in human biology, because the ones I’d done previously were sociology, social welfare and English. So I went back to work...and did the HEFC part-time...” (C9/S4/L21<sup>0</sup>).*

### **3.3.2.3: Expectation and the Transition into Higher Education (H.E.)**

Across the study sample, the transition into H.E. was described as challenging. This was due to homesickness (cases 4 & 5); the challenging workload (cases 1, 2, 3, 6, 8), and the expected increase in academic level (cases 1, 2, 3, 6, 8). Two factors were significant to settling-in and making year 1 successful, both relating to interpersonal relationships with other individuals. These could both facilitate a smooth transition and journey, or contribute to a challenging experience for the participants. However, learning relationships, notably with peers, were viewed as



important in developing understandings, managing the workload and attaining the expected academic level.

The Programme Team expect students will form and work in small study groups, particularly out of contact time, to develop and consolidate understandings and practice skills. For some participants this was hugely beneficial, particularly at times of personal difficulty. For example, Case 6 experienced a period of ill health following placement 1 and prior to practical examinations in January. Their study group were exceptionally supportive in sending notes missed and, prior to the exams, going over some of the practical scenarios they had not been able to practice alone:

*“I definitely was floundering, the amount of information I had to retain...I started to put pressure on myself and that wasn't good, and it resulted in very poor to average marks, and that was disheartening a little bit for me, cos...I got a 2.1 for my [previous degree] and I wanted to get at least a 2.1 for this; and that just didn't marry up now, cos I was just scraping through and the average mark was about 43 or something or 47 and I even failed one of the exams, the neuro one...but it was still uncomfortable.” (C2/S25/L1<sup>-</sup>).*

*“...the physiotherapy course is incredibly difficult, it's a massive challenge, but I think, if you are willing to engage in the challenge...based on my previous degree, I have never, I didn't work like this...” (C3/S50/L6<sup>0</sup>).*

*“[Became ill] straight after my first placement...I was off for 5 weeks instead of 2...that was a big chunk of when I could have been revising, but, then...my friendship group...were sending me notes over Christmas, I'd say “please will you send me something”, and they'd send me it, then after Christmas...I had missed 2 scenarios...my friendship group helped me learn them because they'd done it and they are really quite good [laughing] at teaching, they taught me how to do it...” (C6/S26/L1<sup>0</sup>).*

Two of the mature participants (cases 2 & 7) found it difficult to get involved with a study group, citing the age-gap as a factor. Cases 2 and 7 both acknowledged their personal circumstances, family life and continued part-time work commitments were significant negative factors with respect to integration within their cohort. However, Case 3 found the developing relationship with their study group helped cultivate an active and critical approach to learning. Case 3 reported this improved their understanding of what they already knew, what they were learning, and how that fitted together with clinical practice:

*“...I’m the same age as their parents [laugh] their parents...so it’s not natural, and I don’t socialise with the class and that’s nothing to do with them it’s just that I’ve got the tee-shirt for it, I don’t need to do it...” (C2/S41/L6<sup>0</sup>).*

*“...I run an [...] business at home and it’s still going albeit it’s on its last legs, so I have had to sort of keep that going, cos it pays the bills” (C2/S7/L2<sup>0</sup>).*

*“...I found it hard to get into a study group with other people and I don’t know whether that’s just because...I just don’t have anything in common with anybody...” (C7/S4/L76<sup>-</sup>).*

*“...I think we’ve definitely got a very strong approach and a very practical approach to it...we have these sessions...before you start anything...the first sessions are always, literally...arguments and insults than learning because it’s just hammering it out, giving our opinions and everyone shooting everyone down, but at the end of it you got a table or something, it’s much more structured especially when we’re dealing more with the evidence, people are getting assigned tasks and we are pooling information and everyone’s understanding that if you are going to do it you ought to bring something to it, no one is going to show up and get what everyone else did...” (C3/S52/L6<sup>+</sup>).*

Another significant factor in the transition into the programme and the learning journey through year 1 were clinical practice placements. In part, this was related to the learning relationships with clinical educators and other staff. However, it also related to experiencing the professional role, which was what they were aiming for by undertaking the learning journey. For the majority it was reaffirming they had made the right career choice. However, Case 7 reported being upset when asked on one placement why they were undertaking physiotherapy education at their age. They did report their relationships with other physiotherapy staff were excellent and motivating. For the majority of participants, the clinical staff were supportive, motivating and hugely influential in cultivating theory-practice understandings and professional development:

*“...I had 2 really good placements and I got really good feedback...I was lucky enough to go to the same placement twice, but it was really reaffirming...this is right for you, you are actually good at this, at the level you are, you are good at that...” (C3/S78/L12<sup>+</sup>).*

*“...I really enjoyed the first placement...the course is difficult...very intense, there’s a lot you’ve got to learn, especially in the first couple of months, so, it was a struggle ...and it does make you question your choices and your decision to do the course; but then when you do that placement its great because it clarifies this is what you want to do, you’ve picked the right course, this is exactly it, and that’s what I needed...” (C5/S8/L32<sup>0</sup>).*

*“...I did [placement named]...I didn’t have a positive experience with the Band 7...she was just rude [laugh] and really questioned why I was there, why I was doing a physio degree at my age; so we started off on a bad footing really; luckily there was another physio who I did most of my work experience with, who was wonderful...and all the other staff there, so I got a great opportunity to work with the OTs and assistants and nurses as well, and even though I was terribly upset at first...it was a fantastic placement and I was gutted when I left, I just felt that I was part of the staff, so that was really good” (C7/S4/L67<sup>0</sup>).*

#### **3.3.2.4: The Emergence of Personal Characteristics**

The data suggests participants demonstrated a range of personal characteristics that appeared to have a role in their learning journey. Appendix 8 presents definitions of the key personal characteristics identified by this study and used throughout the thesis. The resilience implied during the recruitment process was observed throughout the academic year. Participants recognised that learning could be challenging, but did not appear to be upset by this. They demonstrated an ability to recover from disappointments and accept mistakes as an aspect of learning from which development and understanding were possible. The same is true of navigating challenging life experiences encountered in their first year. Unexpected twists and turns, which caused emotional upset or anxiety, leading to more challenges on the learning journey were managed with varying degrees of success.

Cases 1, 2, 5, 7 and 8 all experienced either low marks or academic failures. Cases 6, 7 and 9 experienced either personal ill health, or ill health and bereavement of a family member, or friend. With academic disappointment or failure, resilience appeared an important characteristic in appreciating this as an aspect of learning. More importantly, it was observed that individuals displayed the ability to recognise their role in academic failure, accept personal responsibility for problems encountered, and recover from this to continue their studies. The ability to reflect, and recognise their own role in academic failure appeared to be a determining factor in the participants’ resilience to disappointment. Case 2 demonstrated difficulties occur when a student cannot, apparently, reflect on feedback given, or accept, or internalise advice offered. They did not appear to use essay feedback, or the experiences of treating clinical problems to develop the necessary academic and clinical competencies. Additionally, they sought another explanation for their difficulties, a non-specific “change in their body”, suggesting

an external locus of control is to blame for encountered problems:

*“...I quite enjoy essays but I’m still to find the right format to get decent marks; but I do enjoy practical...but I guess that’s my biggest disappointment, that I wasn’t doing well in the practical and I must have treated about 4 or 500 hundred people with their shoulders and the exam I got was about the shoulder and I messed it up, I just couldn’t believe it [laughing]...maybe over worry about it, I don’t know, there’s something changed in my body...” (C2/S51/L1<sup>+</sup>).*

Case 5 and 9 both demonstrated resilience and reflection to different degrees. Case 5 took responsibility for their academic difficulties and looked to move on from this. However, they do not imply understanding why difficulties had been experienced, or what needed to be done to prevent it recurring. Case 9, also demonstrated resilience and an active approach to managing the difficulties caused by their bereavement.

*“...I failed that MSK [musculoskeletal] exam and I think I was just under prepared for it...I didn’t realise how much there was to learn until it was too late but, you get back on and you keep on going...I passed first year and that’s the main thing...” (C5/S22/L4<sup>0</sup>).*

*“...my [relative] wasn’t very well and then...died at Easter. I found out that [they were not] going to get better at the end of February, so, I saw [named guidance tutor] straight away and I had a chat...they were supportive and I knew I would have to take time off, as [they] got worse, so that upset things as far as coming in. I missed quite a few lectures and practical’s’...I was still able to do quite a lot of the theory...obviously I didn’t do a lot of the...actual practical skills; that probably showed in the MSK exam. I had been doing quite a lot of the theory and as far as the viva aspect of it, I was prepared; but I think it was acceptable with the practical...” (C9/S20/L1<sup>0</sup>).*

Those demonstrating reflection, or self-awareness, in combination with conscientiousness, appeared to be more willing and effective learners. They seemed prepared to do what was required to progress. In particular, those participants able to reflect on their practice and experiences appeared more interested in developing better approaches to learning and managing their time and resources:

*“...it came to the exams in January... I hadn’t quite estimated how taxing the exams were going to be...I passed it, just about, but I didn’t get anywhere near the grade that I wanted; and that gave me the kick up the backside that I needed to knuckle down even further,*

*and put the hours in; and that showed in my exams later on in the year where I got much higher grades...so it...made me aware of how much work you actually had to put in, out of uni, not just going to the lectures, but actually sitting and doing the reading, typing up your notes, and doing directed study and revising and starting revision early...” (C8/S6/L16<sup>0</sup>).*

*“...I had two deaths...one that was expected but I didn’t realise how it would hurt me and I had the funeral that morning of my exam; and my other one was a good friend who had died in a car crash. I can remember sitting the day I found out, I was trying to revise and I couldn’t do it, my brain was ticking differently. I was disastrous in that exam, so I had to retake it; but over the summer, I reflected and had a look at how I did revision; and I did it differently, slowly and wrote everything out and pinned it up on walls and practiced over and over again, even though I was doing it by myself, I just found it a better way, and I remember everything from that exam now; so I learned a lot from being in that awful situation...if something doesn’t work, or I’m not good at it, I will work hard, and try and fix it...” (C7/S4/L84<sup>-</sup>).*

### **3.3.2.5: Support networks**

During the first year of studies, the importance of interpersonal relationships was significant. Peers, clinical educators and academic staff were repeatedly cited as important facilitators of learning. Clinical educators were further identified as role models and motivators to achieve professional status:

*“...my clinical educator was just fantastic, obviously massively versed in the neurosurgical rehab and brain and spinal cord injuries, I learned so much; and...there were pennies dropping all over the place...it just tied everything together really well...” (C3/S108/L1<sup>+</sup>).*

*“I have made a good bunch of friends on the course, they are more mature and everyone is on the same level...and that bunch practice together quite a lot, and there is a massive support from that...coming back a little bit unsure, especially without the biology, but having peer support is huge; and that...didn’t happen on my last degree, cos it’s a totally different learning experience what I am doing now...” (C3/S50/L13<sup>+</sup>).*

Academic staff were regarded as important in supporting academic development and offering pastoral support and possibly a coaching role (Case 9 below). Case 2, for example, acknowledged that if they had made better use of the academic staff, some of the problems encountered could have been addressed more effectively. This suggests some degree of self-awareness, although the appreciation of what to do about their difficulties continued to be elusive. Parents,

siblings and spouses remained significant throughout the period offering emotional and financial support, and at times providing 'tough love' (Case 4):

*"...if I was more upfront with the lecturers and more outspoken, I was keeping it to myself because I'm used to getting things done myself, I'm pretty independent, if I'm struggling I put a bit more work into it and I overcome it; but obviously that wasn't happening and because I was practicing all the time, I was coming in every weekend to practice, I wasn't staying perhaps as long as other people, but I was in every day practicing and...perhaps I was too confident that I would get a pass and really I wasn't good enough to get a pass and that was the truth of the matter." (C2/29/L1<sup>0</sup>).*

*"...I think having a really good support network, my parents are [pause] such a big support to me, I don't think they'd [laugh] really let me give up, I mean if I were to phone home it would be like, "pick yourself up, dry your eyes, get on with it"..." (C4/S53/L1<sup>+</sup>).*

*"... [due to relatives illness and death a number of practical session had been missed] I had a few one-on-one sessions with [named staff], where he went through things that I'd missed... and so I didn't go into the exam blind, not as prepared as if I had been at all the practical's, but that was good, the option for one-on-one chats, or one-on-one skills practices was available..." (C9/S22/L2<sup>+</sup>).*

Housemates were also important as a social support network. Although such relationships were mostly positive, this was not always the case. Case 6 experienced major disruption with one housemate who disregarded the needs of the other housemates and created internal house friction:

*"...I had 2 really good flatmates, which have helped me so much, any stresses they were good; but I also [had] a flatmate, which...had a negative impact on first year, she was a party animal, so I didn't get any sleep..." (C6/S4/L38<sup>0</sup>).*

Several participants stated physiotherapy students do not have the same student experience as other students. This was thought to be because other courses have considerably less contact time; have less directed and self-directed (out of hours) study; and generally finish studies weeks before the physiotherapists can return home. These observations suggest students compare their experiences with students on other courses. Further, it implies, whilst there may be some envy for a perceived easier learning journey, commitment to becoming a physiotherapist is motivating:

*"...we don't really have the full student experience, but that's what we signed up for. A*

*healthcare job isn't easy, it's just a matter of...prioritising what you want short term compared to long term."* (C4/S29/L1<sup>0</sup>).

### **3.3.3: Abstraction and Interpretation**

Phase 1 analysis covered a varied period for each participant from pre-application right through to the completion of year 1. For all participants the transition into higher education was challenging. This was because of the need to adjust to institutional demands and expectations and balance them against personal expectations of what physiotherapy education would be like. The learning journey appeared to be facilitated by personal motivation to become a physiotherapist. The balance between the expectations of the participants and the reality of the first year of study was a factor for all, although some were more challenged by this than others were. The quality and extent of the support network for each participant impacted on the ease or otherwise of the learning journey.

Attraction to physiotherapy as a profession appeared to be founded in a personal aspiration to help or care. This could be considered a basic requirement for any prospective healthcare professional. However, in this phase it appeared less about sentimentality and more about making a difference in a practical way. Most participants considered the application and recruitment process, the transition into higher education, and experience of the academic and placement aspects of year 1 daunting. The data suggests personal characteristics emerged as participants encountered the challenges of the first year. Most notably, resilience and conscientiousness appeared key in the participant's ability to accept that the difficulties experienced were normal and part of the learning journey.

However, personal insight and the ability to reflect emerged as a key development characteristic, particularly the ability to learn from mistakes. This was perhaps most obvious when the characteristic appeared absent or less well developed. An inability to reflect and identify the role an individual played in their own academic difficulties invariably led to multiple failures and disappointments. Therefore, it is suggested that the ability to be reflective and self-aware, appears to be an important characteristic associated with student success in the first year of the physiotherapy programme.

The ability to form interpersonal relationships with others was important for several reasons. The establishment of a support network was considered facilitatory to

the learning journey. This was particularly true for those not local to the university, settling into a new country, city, home and educational institution. However, in managing academic and practice placement challenges, the ability to develop learning relationships was much more significant than simple social support. The majority of participants forging positive learning relationships appeared to perform better academically than those who struggled to engage in programme activities with others. Those cases, 1, 3, 8, 9 and Case 4 after a slow start, who identified positive learning interactions with peers progressed well. Cases 2, 5, 7, who indicated difficulties forming good learning relationships, appeared to experience greater academic difficulties. This was particularly true for Case 2, also experienced difficulties on placement.

Participants with well-established support networks and learning relationships displayed several important characteristics. These included the interpersonal skills to be able to form relationships; conscientiousness in using these relationships; and a dynamic approach to their learning. An example of this was the evidence that they established study groups out of normal contact hours on the evenings and weekends to consolidate learning and develop skills. In the practice setting, forming good interpersonal relationships, notably with clinical educators, strongly reinforced personal aspirations and appeared important in making the transition towards fitness-for-purpose, through interactions with role models.

Phase 1 analysis of data illustrated how the initial interest or attraction to physiotherapy appeared to develop in a determination to succeed in becoming a physiotherapist. The challenging experiences on the journey provided opportunities for individual evaluation of personal expectations with professional realities. The emergent personal characteristics were considered influential in how participants managed the challenges encountered during this phase of their learning journey. The ability to succeed in year 1 appeared to be associated with the emergence or presence of characteristics recognisable as contributing to expectations of professionalism as identified in Figure 1.1 and 1.2. These were not only identifiable as professional characteristics, but also related to professional presentation; professional society and social relationship (see Figure 1.1).



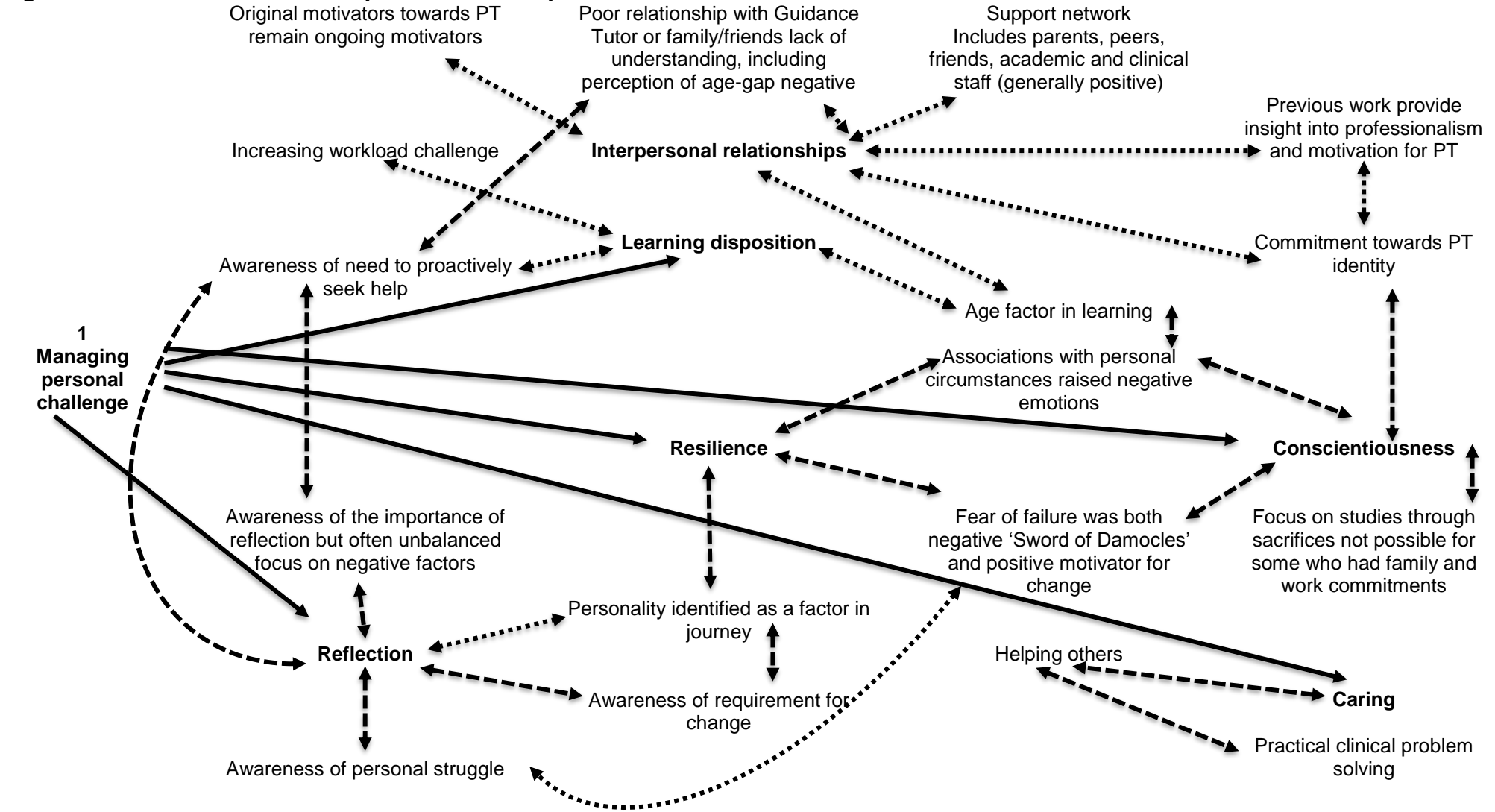
### **3.4: Phase 2: The learning journey through year 2**

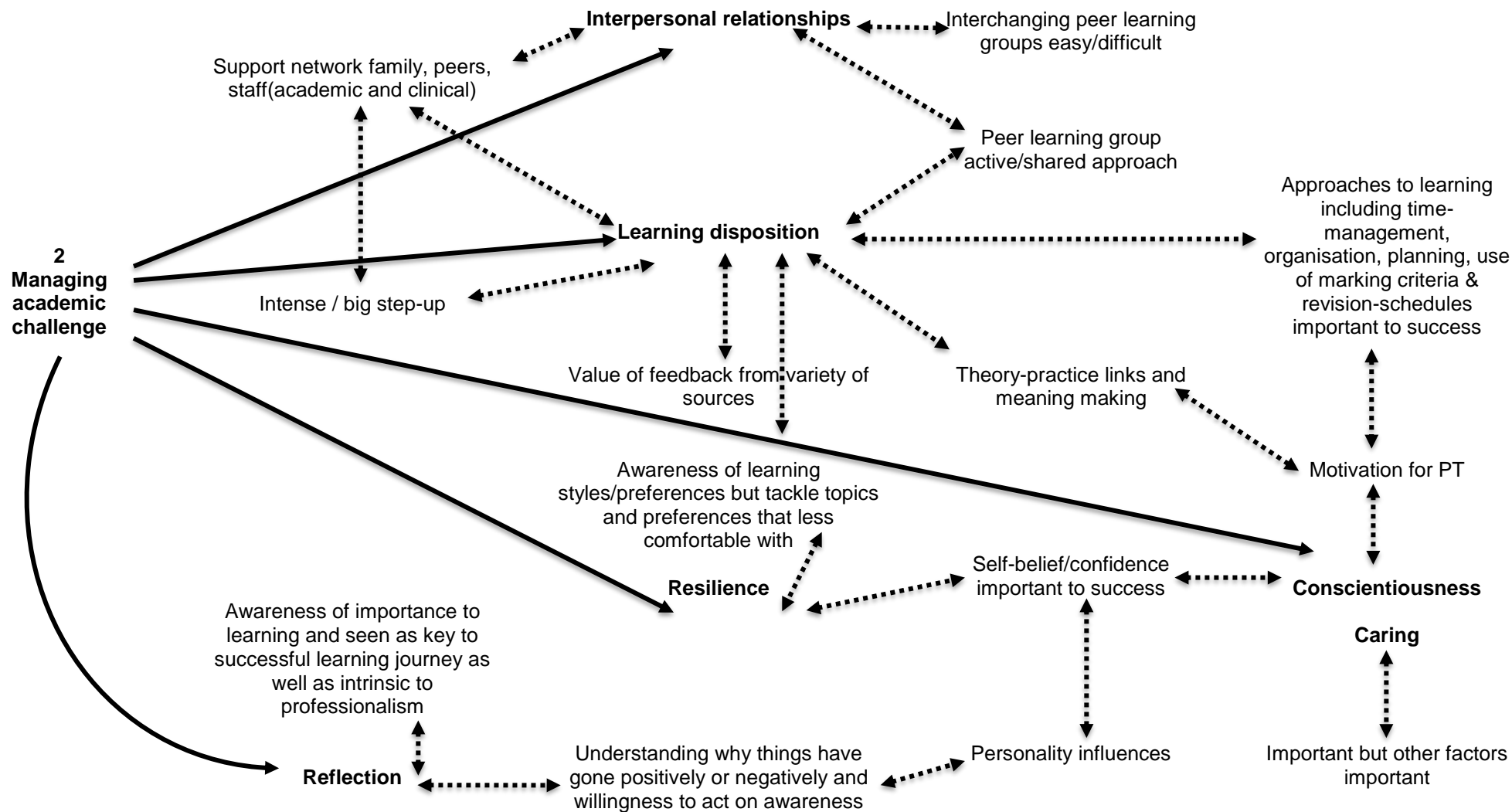
#### **3.4.1: Familiarisation**

Phase 2 focused on year 2 of the programme and was an exploration of how personal characteristics continued to emerge during the second year of studies (see Figure 3.4). During this period, one student withdrew from the physiotherapy programme. Figure 3.5 illustrates the development of the thematic framework (see box 1a, Figure 3.5), keeping the study's original topic areas of enquiry firmly in sight. Box 1b and 2 (see Figure 3.5) identified the newly emergent themes. As with the phase 1 analysis, there was considerable overlap between main themes related to specific challenges encountered on the journey, and the now developing themes related to personal characteristics. For example, Theme 1 managing personal challenges there was, for two cases, a perceived age-gap that influenced interpersonal relationships. However, age also appeared to impact on learning, relevant to the other themes of managing academic and placement challenges. For some of the mature participants the issue appeared to be whether age adversely affected the ability to study. However, for some of the younger participants, immaturity appeared to inhibit managing the challenges of the learning journey.

Once again, the benefit of the dimensional sampling identified differences between the learning journeys of some of the young and mature participants. For some the ability to make sacrifices, such as giving up part-time work to focus on their studies was difficult as it reduced their disposable income; but it was manageable. For others, notably two mature participants this was impossible as they had commitments to mortgage payments, or their income was vital to the family situation.

Figure 3.4: Familiarisation with phase 2 transcripts





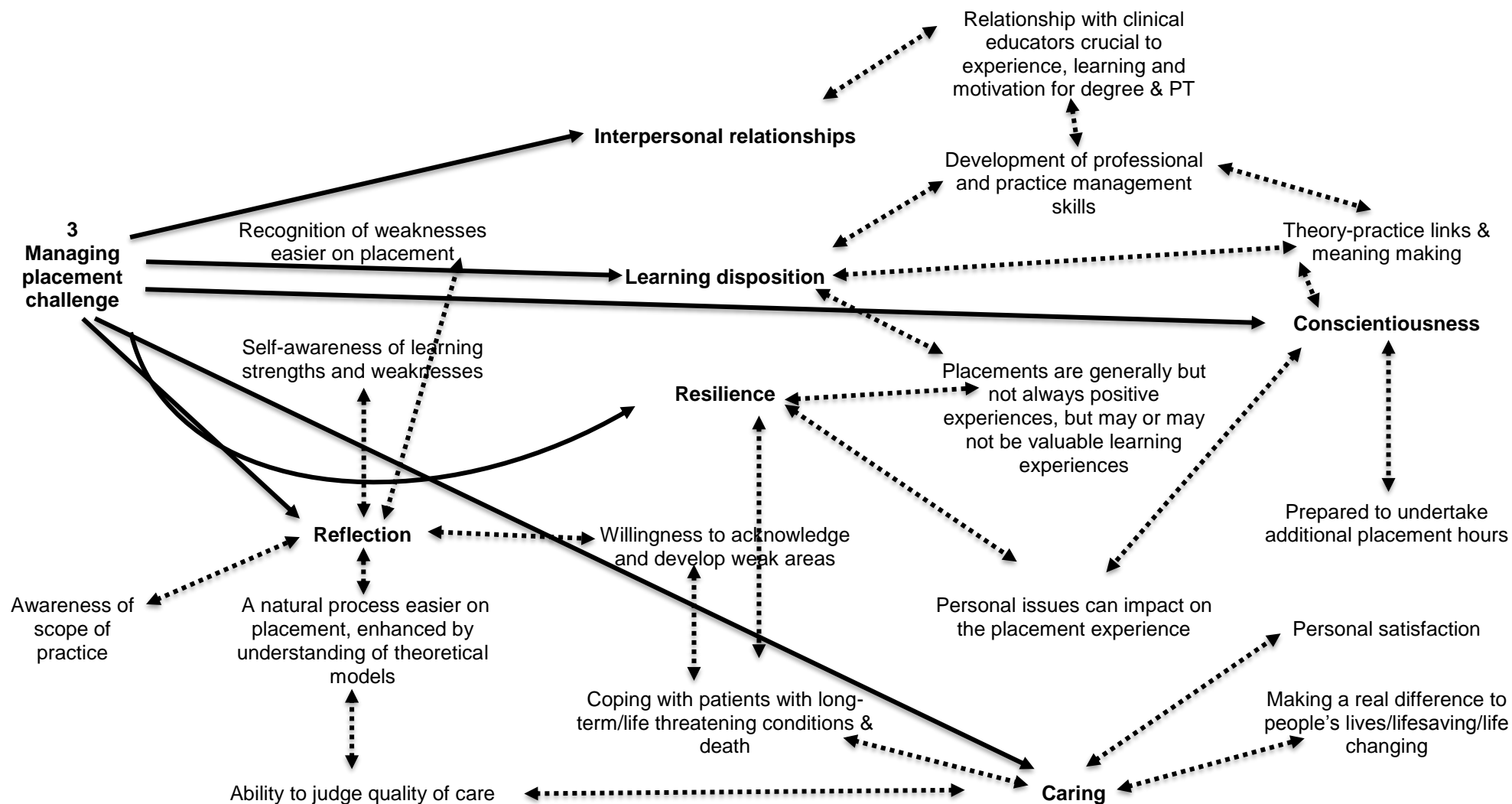
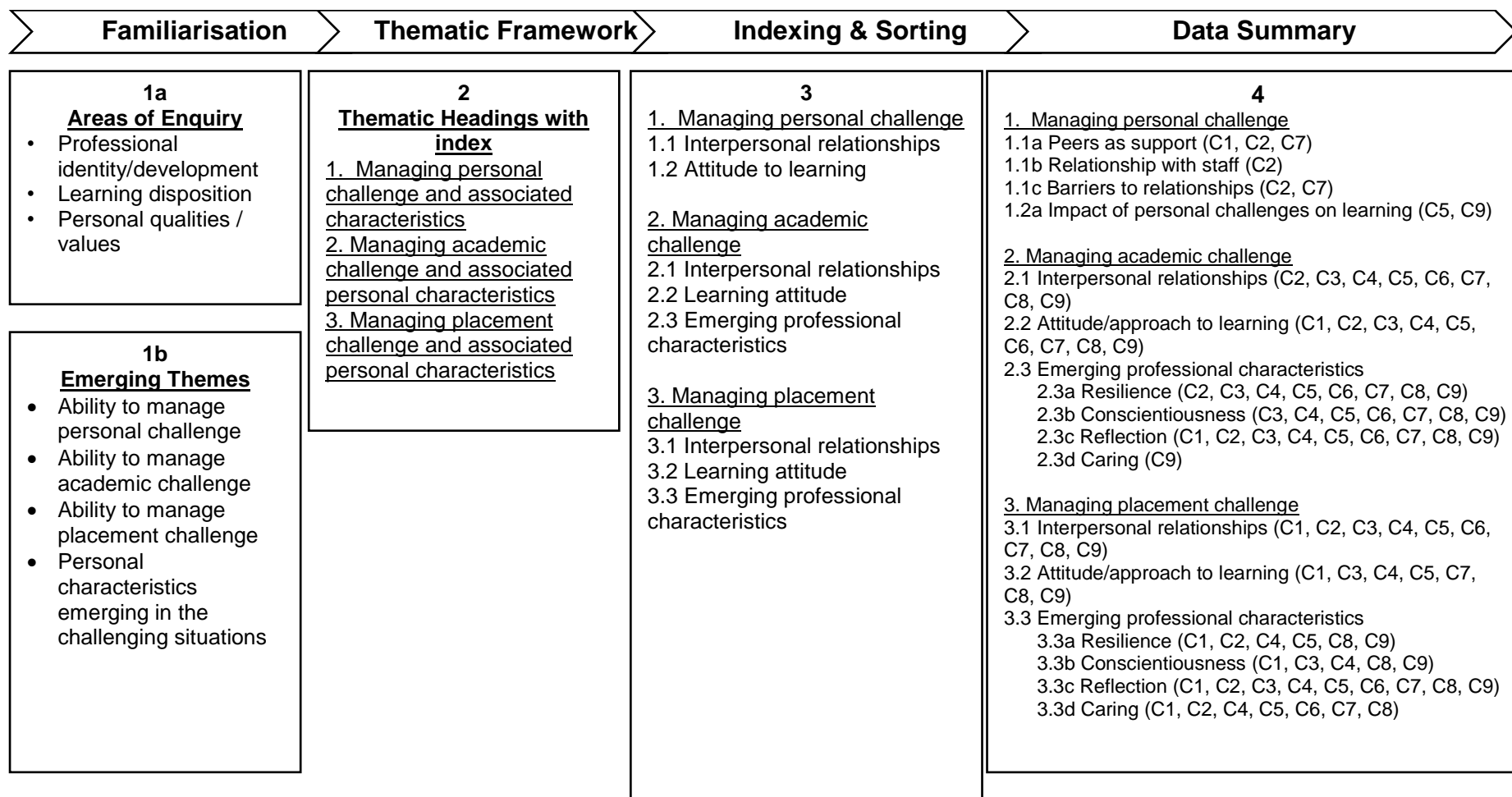


Figure 3.5: Example of the development of the thematic framework from Phase 2 Interview data.



### **3.4.2: Thematic Framework (incorporating indexing, sorting and data summary)**

The development of the thematic framework and the related processes of indexing and sorting and data summary followed a similar format to phase 1. This produced matrices that displayed sub-themes relating to the personal characteristics that had emerged in the first phase. The continued learning journey through year 2 of the programme had three notable aspects identified by the participants (See Figure 3.4). These were academic, clinical practice and personal challenges. In managing these challenges, the personal characteristics that had emerged in phase one were observed as developing into recognisable professional characteristics. Appendix 9 presents data matrix examples of the emergent personal characteristics.

#### **3.4.2.1: Managing personal challenge**

##### **3.4.2.1.1: Role of interpersonal relationships**

It is important to recognise that not all the participants explicitly identified the presence of personal challenge/s in their life. For some, the issue of personal circumstances was implicit. For example, Case 1, a young returner, implied fitting back into university with a new cohort was not straightforward. This problem seemed related to their own lack of perceived need rather than active exclusion from the group:

*“...I keep myself to myself not in a loner way, but I don’t need to know everyone in the class to learn” (C1/S9/L1).*

However, two mature participants who had indicated difficulties integrating with the cohort in phase 1 still expressed problems. Although these difficulties were beginning to resolve, they suggested they were age-gap related. Case 2 suggested the cause was the immaturity of a few, whereas Case 7 appeared to be partly taking responsibility for the apparent alienation:

*“...in the 2nd year last year there was a couple, just one or two people who didn’t want to know me, and I didn’t take it to heart, I just thought it’s the age gap and some are young and still immature, and the one or two people that were like that they are mature now, and they chat to me and it’s interesting that perhaps more and more people could have been like that and that would be a bit disheartening for me if more people were like that.”*

(C2/S45/L3<sup>0</sup>).

*“...you get to know your [peer] groups and...I don’t know whether it’s with age, you just sit back a little bit and let them all get on with it; but you get to know everyone and they’re all lovely, but at the same time [they had] made friends in little groups, it’s like being at school and you’ll see the dynamics of the group they’ve already made in year 1...” (C7/S23/L1<sup>0</sup>).*

Case 2 reported an additional personal issue with his Guidance Tutor:

*“...I wasn’t comfortable with the tutor and I should have been loud enough to say, “I want to change the tutor”, nothing wrong with the tutor...we got on, so there’s no hatred or animosity between us, it’s just, I did not feel comfortable, I wasn’t getting the best out of me, on the tutoring bit and perhaps I should have changed to someone who I could be more open with then that might have been helpful for me.” (C2/S49/L1<sup>1</sup>).*

Both Case 2 and 7 were mature students with family and work commitments that had to be balanced with the demands of the degree. This negatively affected Case 2’s education and ability to manage (resilience). Whereas Case 7 reported feelings of guilt about the perceived, albeit temporary effect on their family:

*“...it’s a multitude of factors; having to do some...orders and do my VAT [laugh] and do my books, really I need to keep that up to date, get the invoices out and chase the money, that didn’t help, however, I did put time into the studies and I didn’t appreciate the fact that I had to think about it differently with regards to the practical exams...more rehearsal and I would miss bits out, I’d say “I know that bit so I’ll not bother doing it”, but I should have done the whole thing because when it came to some of the exams I just flustered, it was shocking, I couldn’t believe what was happening to me, inside, it just wasn’t me [laugh].” (C2/S31/L1<sup>0</sup>).*

*“...I’ve had to [work throughout the course] to keep mortgage payments and stuff [laughing]...” (C7/S11/L1<sup>1</sup>).*

*“...I never wanted to have children to leave them; although I have to do that to get through this, it’s a temporary thing, it’s three years and [I’ll] do it, I’ve got good support from home, it’s never ever been questioned “you shouldn’t have done this, you should have just carried on doing your job”. I probably feel a bit guilty because of the time it’s taken me away from home and being a mum.” (C7/S79/L7<sup>0</sup>).*

#### **3.4.2.1.2: The impact of personal challenges on learning**

Case 5 experienced two different personal challenges. Having failed some

modules in year 1 they had successfully re-taken them. However, on returning for year 2 they found not only was the workload more intense but they also experienced two bereavements:

*“... [Semester 1 was] very intense, a lot of work to begin with, especially after having two months off; but I had a couple of circumstances which put me back a lot with my exams and progress. I had a really close family friend die the day before [the ‘Public Health’ module] exam, so I didn’t take the exam [in October] and took it in December; but between those two dates I also had my [relative] die three weeks after my family friend, so that again jeopardised my other two [practical] exams which were meant to be in December, so everything threw me...” (C5/S8/L1<sup>-</sup>).*

For Case 9, returning to university had uncomfortable associations with the illness and death of a close relative in semester 2 of year 1. However, getting on with work and beginning to make theory-practice links helped address this:

*“... [Returning to year 2] it was coming back to a place where I suppose I was when things weren’t going too well last year where I hadn’t really been for a little while, that had an impact on things definitely, I had a bit of association with working here and what had happened in the first year, so that slowed me down engaging...” (C9/S9/L1<sup>-</sup>).*

*“...the modules [helped me], initially it was very lecture heavy in the first few weeks, there was quite a lot of theoretical stuff, but once we got going with the practical aspects I felt a lot more engaged and a bit more enthusiastic you could see the point of the theoretical stuff [how it] fitted into the practical aspects...” (C9/S11/L1<sup>+</sup>).*

### **3.4.2.2: Managing academic challenge**

#### **3.4.2.2.1: The role of interpersonal relationships**

Interpersonal relationships notably with peers remained important within the learning journey. They were both a support and a learning and development resource, which when used appropriately motivated and facilitated learning. For Case 2 the new cohort they joined were inspiring with respect to their attitude to work in comparison to his original cohort:

*“...the people within the cohort are tremendous, they seem to be a better quality, but that’s not taking away anything from the third years’ cos they were good people; but they seem to be really raising their game, so I take a lot from that, I see how much work they put in and I said “I need to put a little bit of extra work in coz that’s not good enough really”*



...” (C2/S41/L2+).

However, others notably case 3, 4, 6, 8 and 9 viewed both support and peer-group learning as a dynamic interaction. This was conceived as process in which ideas/issues were shared, explored and solutions generated. Engaging in this manner led to developing understandings and awareness of their personal learning:

*“...even in activities that are quite individual like writing an essay [pause] we’ll still meet up [pause] we’ll still argue and draw all over a white board and take photos of it and argue everything out and you come away feeling better about it [pause]...it’s good to be able to bounce off with people...I’ve definitely learned about how I learned from the last few years...”* (C3/S35/L2+).

*“[Peers are] just as important as they were the first year, we just click and when we had two practical exams [December] we were literally in uni non-stop and we were around at each other’s houses if we got stuck, practicing and the day of our exams we were on the phone to try and make sure that everyone was calm; and my essays as well we will sit down and [say] “right don’t panic, this is what we need to do” ...”* (C6/S17/L1+).

For cases 5 & 7 the situation was different, with support equating to reassurance only. The idea of a dynamic learning relationship was viewed with trepidation, or as a missed opportunity. For Case 7, despite working with various groups they had not become established with any one group. They therefore felt they had missed out, on both emotional support and learning development:

*“Never really talked about it [planning] I think it’s more, “you’re alright, you’re on the right track”, otherwise we seem to scare each other [pause] so it’s probably best just to keep things at the basics [laugh].”* (C5/S82/L1<sup>0</sup>).

*“...you can’t really interchange [with peer groups] that’s been difficult for me because I wasn’t really established in any group; not that I can’t work with anyone and I have, but my time has been, not a lonely time, I wouldn’t say that cos you’re surrounded by people, but I feel like I’m very much on my own doing the degree; I’m racing from here, working and what have you, so...I have to be by myself because it doesn’t fit in with anybody...”* (C7/S23/L5<sup>0</sup>).

### 3.4.2.2.2: The impact of academic challenges on learning

The academic challenge of year 2 was evident for all participants and for some resulted in disappointing results or even failure. This appeared to be a period of developing maturity for several participants. Having successfully passed into year 2 there seemed, for some, to be a temptation to ease-off with respect to study and engage more in social rather than learning activities. The resultant problems this created demanded a positive response and resilience in accepting responsibility for shortcomings, and acting on critical (positive and negative) feedback. This was observed as moving towards the development of professionalism. Cases 1 and 8 experienced failures but despite the disappointment and anxiety this caused they both took responsibility and altered their approach for subsequent assessments:

*"I had to re-sit an exam and that was quite an anxious thing, but in a positive spin I didn't want to experience that sort of anxiety again so it pushed me into more preparation in other exams and assignments" (C1/S53/L2<sup>0</sup>).*

*"...the 'public health' [module] presentation at the start of second year I failed, basically because I interpreted it wrong, that made me more driven to make sure all my other marks are up to a good standard; and I basically took my social life out of the equation, focusing all my energy on [practical exams] and I passed them reasonably well; I tried to know my limits and drive myself and discipline myself." (C8/S25/L8<sup>0</sup>).*

Several participants (Cases 4, 6 and 9) were disappointed with some of their results but acknowledged this was their fault through a loss of focus. For Case 9 this was explained as not having done enough practice:

*"... ['Public Health' module assessment] I don't think I put the hours in and practiced saying the presentation; because of my limited IT skills, it [the presentation] looked fairly basic, so visually it's not particularly engaging; because I haven't put the practice in and talked through the presentation, it didn't come across as well as it should do; content wise I'm ok, but presentation wise I dropped marks" (C9/S19/L1<sup>0</sup>).*

Case 5 found the additional challenge of having to retake some practical exams increased the threat to her ability to manage. However, in negotiation with staff, resits were organised so they would not interfere with the semester 2 assessments. Thus, they demonstrated resilience in coping, but clearly at an emotional cost:

*“...we had [three] different modules going on at the same time, all essay based and all had to be in within a month of each other. So, with the pressure of having those two [December] exams to retake and the three essays there was quite a lot going on [laughing]. I decided to take [one of the practical exams] in September instead to try and relieve that pressure; but that added pressure onto year three so I feel like I’m [pause] clinging on to this course [pause] I’ve never really been with the course, or been with the group...” (C5/S18/L1<sup>0</sup>).*

#### **3.4.2.2.3: The development of professional characteristics**

Case 3 suggested managing the challenge is a learning experience in itself; but also implied success demanded applying oneself and working hard to achieve aspirations:

*“... [you learn] how far you can go, you can be pushed, how far can you push yourself and come out of it. You have to be willing for it to be hard, but you definitely take from that I did it and it worked out fine. It was really difficult but it worked and I know I can do it, I can work hard and come out of it quite well I know it will be ok, but it’s just not going to be pleasant...but then it’s your eyes on the prize.” (C3/S11/L1<sup>+</sup>).*

*“...you’re recognising what the challenge is and you have to just take responsibility for yourself and engage in that because...it...comes back to...sacrifices and giving things up for it, it’s stupid to do that if you are not going to give it everything that you have...it makes it less of a sacrifice...if you only half do something, if you give something up then don’t really apply yourself, why did you do that and then not to engage? I don’t think that was even an option for me personally...even when I was cheesed off with organisational factors you have to just get on with it.” (C3/S51/L1<sup>+</sup>).*

Case 2, apparently accepted that their exam failure and low marks were fair. They even suggested better use of marking criteria would rectify the problem, which implies reflexivity. However, their resilience to challenges appeared fragile and in the face of disappointment, they stopped caring and stopped studying. Therefore, the personal insights into their performance were clearly limited:

*“...I had two practical’s [exams] last year, one I did really poorly in and the second one, I didn’t care, I stopped studying, I said “I am not going to do another bit of studying” and I thought I did OK, but I got a poor mark again [laughing] I seem to be 10 or 15 points out, but I enjoyed it, I had a bit of a rapport with the patient [model], it wasn’t a great demonstration, but I got the process done, but [laughing] I was devastated because I thought that’s a 60 odd percent [laugh]; I didn’t have the ‘evidence’ and so it was quite*

*right, the mark was fair, I need to go back to the crib sheet [marking criteria], which I didn't do, in the first and second year [first attempt] like I'm doing now, I'm glad of the crib sheet..." (C2/S71/L11<sup>0</sup>).*

Success appeared driven by the ability to reflect on what needed to be done to improve or to achieve; and conscientiousness to meet the requirements of the learning journey. Case 4 identified awareness of their personal and professional development. They implied year 1 was an apprenticeship in which basic academic skills were developed, followed by understanding of precisely what is required to achieve a successful learning journey:

*"...now I know how to go about finding the information. In first year it was such a frantic time of "I don't how to do this", "I don't know where to find it", "I don't know what I'm doing" and that's fine because that is what first year is for, is to find your feet and to adjust..." (C4/S37/L6<sup>0</sup>).*

Case 5 also acknowledged the availability of support, in terms of feedback from staff. However, they suggested they should have made better use of the resource with respect to their learning style. They also acknowledged they must take the responsibility to seek out feedback and be proactive in taking material to the tutorials rather than just expecting to be told what to do. However, unlike Case 4, Case 5 did not appear to have benefitted from the year 1 apprenticeship in terms of basic academic assignment planning and associated activities. There remains a suggestion of immaturity and that they had not yet fully engaged with the professional characteristics that would facilitate the professional learning journey:

*"I think the feedback's been really good, but I should have taken it upon myself to go and see the marker and get some feedback in person [pause] cos for my learning I think that's better for me, to actually speak to the marker instead of written feedback...maybe I should have done that prior to [pause] handing in the essay and [pause] go with a plan [pause] and that's...where I struggle, I don't make a plan, I don't really know how to make a plan and that's [pause] not a good thing [laugh]." (C5/S30/L1<sup>0</sup>).*

However, Cases 6, 8 and 9 implied they were beginning to appreciate the characteristics necessary for a successful journey. Case 6 suggested time-management and planning academic tasks were their personal responsibility. With increased self-awareness, they appreciated the requirement for pro-activity in managing academic challenges. Case 8 was driven by a disappointing mark, but reflected that hard work was required to improve future performance. Case 9

implied self-awareness by identifying hard work, planning and time-management, as well as an early start with assignment preparation were important to success. These are indications of the development of professional characteristics of responsibility and accountability, which are professional expectations, and the price for autonomy or clinical freedom:

*“...I’m more organised, I find out what I’ve got to do; with this essay that I’ve done I wanted to know what we had to do ages before it had to be due in whereas in first year I was more nervous about what I had to do so I stepped back a bit, whereas now I want to know what to do so I can get it done and I don’t have to stress about it...” (C6/S25/L1<sup>+</sup>).*

*“...I did reflect on it [a poor module mark in year 1] and the bottom line was I hadn’t done enough revision; I hadn’t put enough work in and I knew going into it that it wasn’t going to be a strong mark; but it wasn’t a mark that I was happy with, it was something I wanted to change and that was the kick start for me really working hard, that result was what drove me and I showed to myself that with work I could change things...” (C8/S25/L1<sup>0</sup>).*

*“... [My approach is] I just put the hours in. I’m not very efficient at writing essays I get a lot of wasted hours; but [I] put the hours in, being dogged and having a plan, spider diagrams that sort of thing has really helped me; and I can see that things are better when I’ve done that, than when I haven’t...” (C9/S63/L1<sup>0</sup>).*

The development of some professional characteristics for Case 7 was impeded by their personal circumstances (paid employment and family life), with time-management the biggest problem. However, in taking personal responsibility for their shortcomings and recognising a need for change, they imply reflexivity and the potential to develop into an autonomous professional:

*“I found it really difficult [at the beginning of year 2] it was a massive rush to get everything in and I felt my time management hadn’t [improved] sitting down and saying “right I’ve got to do this now” I found it really difficult, I just had too [many] other things on and I’ve just been worried about ‘can I get my work in?’” (C7/S9/L1<sup>-</sup>).*

*“...it is my problem, it’s like getting a sharp shock, to get things in place. I know I’ve got a certain length of time and I’m at it all the time because I want to get it done [pause] maybe [I] have a false sense of security that I can do things quickly or better under pressure, but I don’t think that’s true, I don’t think it’s true in anybody, it’s a false thing.” (C7/S47/L1<sup>0</sup>).*

The link between personal characteristics and the development of professionalism was again illustrated when they appeared deficient. Case 2 also acknowledged

the need to work harder and alter some unspecified aspects of their approach to learning. However, the implication was that reflection had not fully helped identify what led to the need to step off the programme the previous year. This implied a lack self-awareness, but more concerning at this stage was the apparent absence of accountability and responsibility.

*“I do feel positive and happier with myself; I got ‘the public health’ done and I didn’t get a great mark but I didn’t get a bad mark, it was OK, I thought it was worth more but I was happyish with the marks, so that helped, and I’m on the right path and I just have to do a little bit more and adapt a couple of extra things because I want to get a decent mark, I really do, because I can do some of the things that I did last year with my eyes closed, it’s crazy, it really is, I can’t comprehend why I got myself in a tizz.” (C2/S39/L1<sup>0</sup>).*

### **3.4.2.3: Managing placement challenge**

#### **3.4.2.3.1: The role of interpersonal relationships**

Placement in year 2 presented participants with a number of challenges. These were raised expectations that they would be able to do more with respect to assessment and treatment of service-users. Additionally, there were expectations they would be able to contribute to the delivery of the service to which they were attached. Interpersonal relationships again were crucial to both pastoral support and the development of learning. These clinical experiences were opportunities for participants to consolidate their understanding of physiotherapy through exposure to positive role models. Case 1 implied an important role of clinical educators was in aiding development of professional characteristics, specifically through guided reflections. They suggested that when educators discussed their reasoning with either the patient, in the students’ presence, or directly with the student, they aided the student make theory-practice links and enhance their understandings. Case 6 reported that a direct questioning approach adopted by one educator was challenging, but provided an opportunity for the student to demonstrate knowledge. This approach enhanced the placement experience as it confirmed Case 6 was operating at the expected level:

*“...I find observing first and then [pause] I found educators that talk through it either with a patient or with yourself underpinning some of the theory behind it; I find that easier...” (C1/S63/L1<sup>+</sup>).*

*“...because it was community I was in a car with her [Clinical Educator] quite a lot and she asked me loads of questions and I [thought] “oh my word, what are you doing?” In the end it turned out to be a good thing; I enjoyed being put on the spot, she dragged stuff out of me. I felt I learned a lot more because she was putting me on the spot; my placement overall was amazing...I didn’t think I would enjoy the community...but I did.” (C6/S9/L12+)*

#### **3.4.2.3.2: The impact of placement challenges on learning**

Clinical placement, for all participants, provided clear insights into the wider roles of the profession as well as providing the opportunity to make meaning and demonstrate knowledge and understanding. For Case 5 the practical experience made theoretical knowledge much more concrete. This view was shared with Case 7, who gained satisfaction when making knowledge links that led to a positive result for the patient. This implied the presence of the caring characteristic of making a difference to others lives:

*“...the MSK placement was the confirming one that this is where I wanted to be. I do feel I learn a lot when I’m on placement, learning off other professionals. It is interesting being on placement having an actual patient instead of; when we’re in [university] we pretend with each other that we’ve got a problem, but you never really know until you go onto practice and you actually feel it and you understand how you can take that learning in a classroom to [practice]...” (C5/S60/L2+).*

*“...you get a buzz, as a bonus, that you do an assessment and you know what it is; and then you do the treatment and it works and I think that’s like winning something...” (C7/S57/L1+)*

#### **3.4.2.3.3: The development of professional characteristics**

Cases 3 and 9 identified that not all placements are enjoyable, but that learning is not dependent on enjoyment, or a positive relationship with the clinical educator. This implied a professional approach to gaining balanced understandings of clinical practice:

*“...it wasn’t such a great placement; it is important to see the good and the bad you know you can take from both” (C3/S43/L4<sup>0</sup>).*

*“...when I look back at it [the elective], it wasn’t a positive place, but it didn’t change what I was taught, or how I learned things, so it was more an external factor which didn’t really change the way I was learning things...” (C9/S81/L1<sup>0</sup>).*

However, two younger participants had extremely negative experiences on their January placements. In both cases, the lack of a positive relationship with their clinical educator was cited as the major factor leading one to contemplate leaving the Programme. Certainly, the development of a relationship is two-way and the difficulty in these examples may well have been with the clinician. The demanding and time-consuming role of the clinician could have been a factor in which they may not have had the time to support and nurture these young participants. However, that is true for most clinicians and none of the other participants identified the time constraints of their educators as negatively influencing their learning experience. There is a suggestion that the perceived poor relationship negatively affected their resilience. Alternatively, immaturity may inhibit the emergence, or development of professional characteristics:

*“...after exams...I got a neuro placement which I was really nervous about...neuro is not my strong topic, I just found it really difficult, so I absolutely crammed the work in over Christmas...and then I didn’t enjoy it...I found throughout the whole month I was always intimidated...there were highlights in it, the patients were great...but...I was just so intimidated by her [clinical educator]...I felt I didn’t have a bond with her; and she was always really busy, so I felt...I was...a bit in the way, more than being part of the team...”* (C4/S13/L8<sup>0</sup>);

*“...I didn’t have the greatest [January] placement...I didn’t click with my educator. After...everything that had happened, it just wasn’t a great placement and I was thinking about coming off the course. I didn’t think it was for me, I wasn’t enjoying it, I was struggling a lot, I was behind everyone else; and then after that placement I didn’t want to be here anymore, I just wanted to go back to...be with my mum...I felt I was a bit isolated on my own here...so [I] really struggled through January and February...”* (C5/S8/L12<sup>1</sup>).

Case 2 found year 2 placements particularly challenging and there is a suggestion they perceived educator’s expectations were being unreasonable. However, given the participants previous academic and professional achievement, expectations of better performance were not unreasonable. In addition, with the amount of feedback students receive from educators and academics, reflection should highlight where and how mistakes have been made, and point towards solutions to prevent reoccurrence. The response lacked analysis and therefore hints at a possible lack of reflectivity. This, in turn, limited the potential placement learning opportunity:



*“...I did think she had expectations that because I am mature, because I treat people at home...I’m not sure, but she was disappointed, she thought I’d be up here [raised hand gesture] when I was down here [lowering hand gesture] although it didn’t go well for me I did enjoy meeting the patients and I got a lot from it, but [pause] didn’t pass it.”*  
(C2/S63/L1<sup>0</sup>).

Placement provided the most explicit experience of the roles and responsibilities of physiotherapy in which participants were able to make comparisons between their expectations of the profession and clinical reality. The clinical educator as role model and performance assessor provided developmental opportunities and feedback for reflection. Case 2 partially demonstrated the identification of similarities and differences between their vision of being physiotherapist and the clinical reality. They also reinforced the impact of clinical educator feedback:

*“...there’s still [pause] a small doubt with regard to placements, because one of the placements especially didn’t work out well; and the second placement I set myself up for a fall, so there is a small doubt there because, I didn’t accept what the physio said, that I wasn’t cut out to be a physio, and that knocked me for six. I don’t know why, cos I’m a bullish person, people can say things to me and...I did say to her, “it doesn’t matter what you think I’m still going to do this”, [laughing] I actually enjoyed, I loved, the people coming in MSK, everyone was great and the variety, I loved it, I just wasn’t that good at it, and I don’t know why, I wasn’t good at all.”* (C2/S57/L1<sup>1</sup>).

Case 2 was clearly upset by negative feedback received, but implied the clinical staff may have had a valid point about his professional suitability. There is a suggestion that, on reflection, they might have been coming to this conclusion himself. However, this insight is only explored so far. Rather than dealing with the key issues identified by the clinical educator, Case 2 appeared to display a misplaced stubborn optimism. This was further emphasised by the apparent struggle to utilise personal reflection, or educator feedback. This indeed was viewed as a negative attack, rather than an opportunity to address identified problems with knowledge or practice skills:

*“...I was missing out things about some of the red flags [findings suggestive of serious pathology] and I knew about it, I could tell you why, but I was omitting them from the initial assessment and I just didn’t enjoy it, I kept on getting negative feedback, I don’t work well with that, I don’t think anyone works well with that.”* (C2/S59/L1<sup>1</sup>).

The motivation to develop into a caring physiotherapist was generally implicit.

However, placement often provided memorable interactions with patients that reinforced a caring characteristic. Making a practical difference to other people's lives appeared to be an ongoing and developing aspect of the attraction to the physiotherapy identity. Even when other, pragmatic considerations become more pressing as with Case 9, caring is still important:

*"...[caring] it's still a high [motivation] percentage but it's maybe not as much as things like providing for your family, getting a wage, coming in after a few years of not bringing in wages, has increased in importance..." (C9/S85/L1<sup>0</sup>).*

*"I really like people and interacting with people; and I like helping in whatever way I can. My oncology placement, if I hadn't met those people I wouldn't be the person I am now [pause] it does have an effect on you and you do take so much away from it whenever you meet such [pause] inspiring patients..." (C4/S35/L1<sup>+</sup>)*

*"...I love this degree; what clinched it for me was making patients better and seeing them being discharged; especially if you see them all the way through and getting a patient back to doing something they didn't think they would be able to do again; for example, on the cardio placement a guy said to me "I'll never walk with my stick again"; and we got him back with his stick and he cried and that was fantastic; I nearly cried and I don't cry and I nearly cried..." (C8/S89/L1<sup>+</sup>).*

### **3.4.3: Abstraction and Interpretation**

Phase 2 data analysis related to the participants ability to manage three key aspects of the learning journey. In year 2 the expectations are that students will begin to apply knowledge gained in year 1 to develop their understanding of the clinical problems experienced by service-users; and develop the clinical decision-making and practical skills to address these problems. This phase of the journey created demands that the participants identified as personal; academic; and with a greater programme emphasis on clinical practice in semester 2, placement challenges. In their attempts to managed the various challenges encountered participants illustrated the presence of personal characteristics that were congruent, or not, with professional physiotherapy characteristics (data examples are presented in Appendix 10).

Several participants experienced personal challenges, including personal health problems or the illness and bereavement of a friend or family member. Resilience once again emerged as significant, enabling individuals to cope and bounce back.

When combined with conscientiousness, participants were able to immerse themselves in work and combat negative emotions of their situation.

Phase 1 analysis had identified the importance of good support networks. These included social support of family and friends, emotional and learning support from peers; and professional development and pastoral support from academic and clinical staff. This was re-emphasised as important in all aspects of managing the challenges of year 2. For those individuals who struggled to forge interpersonal and learning relationships the journey became more difficult and relatively isolated. The opportunities to develop understandings and improve learning were not always taken or their significance was lost. Two participants (cases 2 & 7) had difficulties establishing themselves into a study group in year 1. This continued through year 2, although both appeared able to interact with their cohort relatively easily, rejecting the suggestion there was active ageism. The added difficulties for mature participants with family and work commitments appear related to logistics and time-management between the various commitments. However, their management of the academic and clinical challenges implied they were struggling to demonstrate the development of professionalism with respect to behaviour and professional characteristics expected at this stage of their education (see Figure 1.1).

An increasing number of participants had begun to understand the benefit, not just of social support, but also of genuine learning support. This included active engagement with peers and making more focused use of academic and clinical educator feedback. This benefit manifested in several ways, from smarter ways of working, active group learning (in which skills were shared to achieve tasks), through to deeper understanding and theory-practice links. This related to a professional commitment towards learning and continuing professional development (see Figure 1.1).

Managing academic challenges were facilitated by a positive, active and deep approach to learning. Once again, the value of dynamic study groups was in evidence. However, these were tending to develop into groupings with rules based around the premise that if an individual partakes in the group they must contribute to it. The personal characteristics emerging from Phase 1 were clearly developing in Phase 2 towards recognisably professional characteristics. Resilience was required to manage challenges and take responsibility when things

did not go to plan. Conscientiousness was important in fulfilling the programme academic and placement demands, with reflection again emerging as a key learning characteristic. As the range of clinical experiences increased the requirement to explore and understand learning from such exposure related well to the professional characteristics of a positive attitude to learning and reflective practice. However, the apparent absence of a characteristic reinforced its importance to a successful learning journey. Those lacking reflexivity, notably Case 2, repeatedly failed to show personal insight or reflection of why things had gone wrong and what could be done to remedy this. The compounding problems of a somewhat fragile resilience, and limited learning relationships ultimately led to failure of Case 2's repeat year 2.

For the majority of participants, clinical practice experiences confirmed their ambition to become a physiotherapist. In this setting the similarities and differences between the participants developing expectation of physiotherapy and the realities of clinical practice were made. This was facilitated or inhibited by clinical and academic staff role models. In managing the challenges encountered in the clinical setting, learning relationships were important for making meaning particularly between theory and practice knowledge. For two mature participants (Cases 3 and 9) these relationships did not need to be social or "good", with both recognising one could learn from positive and negative experiences, or without the need to be friends with the educators. This implies the emergence of autonomous practitioner characteristics.

For, two young participants (Cases 4 & 5) the lack of a bond with their educator caused them to question their ambition and future commitment to the Programme. There is a suggestion that maturity, or immaturity may play a role in the development and emergence of professional characteristics. This may simply be related to an individual's personal stage of development. Here, characteristics, such as resilience, reflexivity and conscientiousness may be more or less formed at the point of embarking on their learning journey. Those more immature students then experience greater difficulty in understanding the nature of professional characteristics, including professional relationships. Any threat to the development of professionally recognisable relationships is a cause for concern as this is at the heart of being a healthcare professional.

Year 2 presented the participants with experiences that illustrated the presence or apparent absence of personal characteristics contributing to their learning journey and development as physiotherapists. Those personal characteristics appeared consistent between phases, although more explicit and recognisable as relating to emerging professionalism in Phase 2. This was possibly due to the year 2 focus on the application of knowledge to clinical problems and the increased exposure of students to clinical practice. Therefore, characteristics were more easily discernible as related to notions of fitness-to-practice illustrated in Figure 1.1. The professional characteristics were more developed in some participants, indicating they were beginning to recognise both scope of practice and autonomy. Professional society clearly had gained importance and relevance to the journey as demonstrated by the two young participants challenged January placement experiences. Immaturity also played a role amongst participants who had successfully progressed into year 2 underestimating the increase in challenge and therefore the increased demand on them to continue to develop academically, practically and professionally.

Understanding the profession's wider social relationship was developing amongst some participants. This was best illustrated by the two mature participant's appreciation of their personal learning and wider social value of even poor placement experiences. As with Phase 1, it was the apparent absence of characteristics that highlighted their importance to managing various challenges and facilitating a successful learning journey. This was most clearly illustrated by the withdrawal of mature participant, Case 2 at the end of their second attempt at year 2.

### **3.5: Phase 3: The learning journey through year 3 and programme reflections**

#### **3.5.1: Familiarisation**

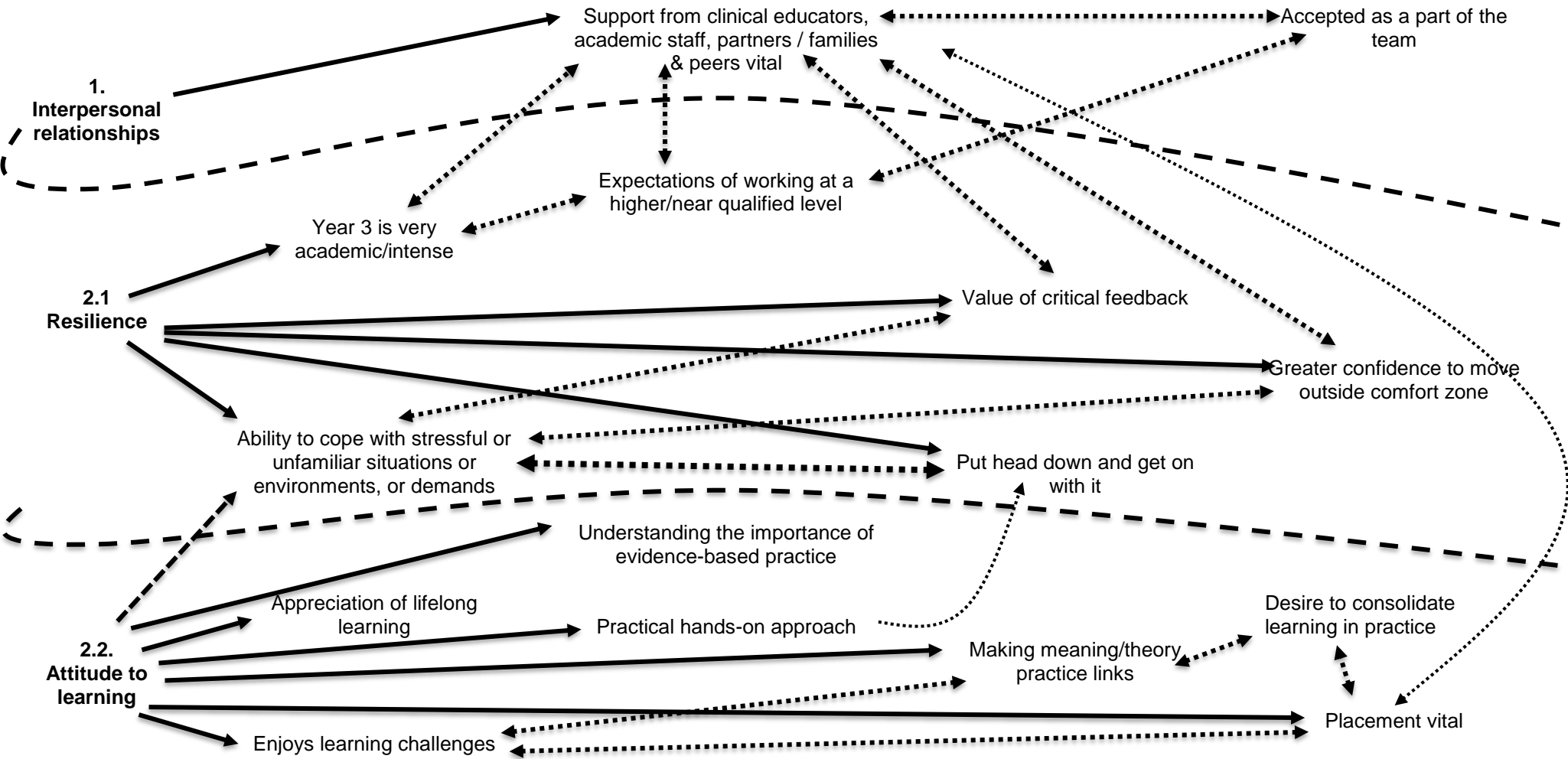
Familiarisation followed the same process as in phase 1 and 2 (Figure 3.1 and 3.4). The emergent personal characteristics identified at those phases continued to be manifest by the remaining participants throughout their continued learning journeys through year 3 (Figure 3.6). Figure 3.7 illustrates the development of the thematic framework, box 1a, keeping the study's original topic areas of enquiry firmly in sight and box 1b and 2 identifying the continuation and development of

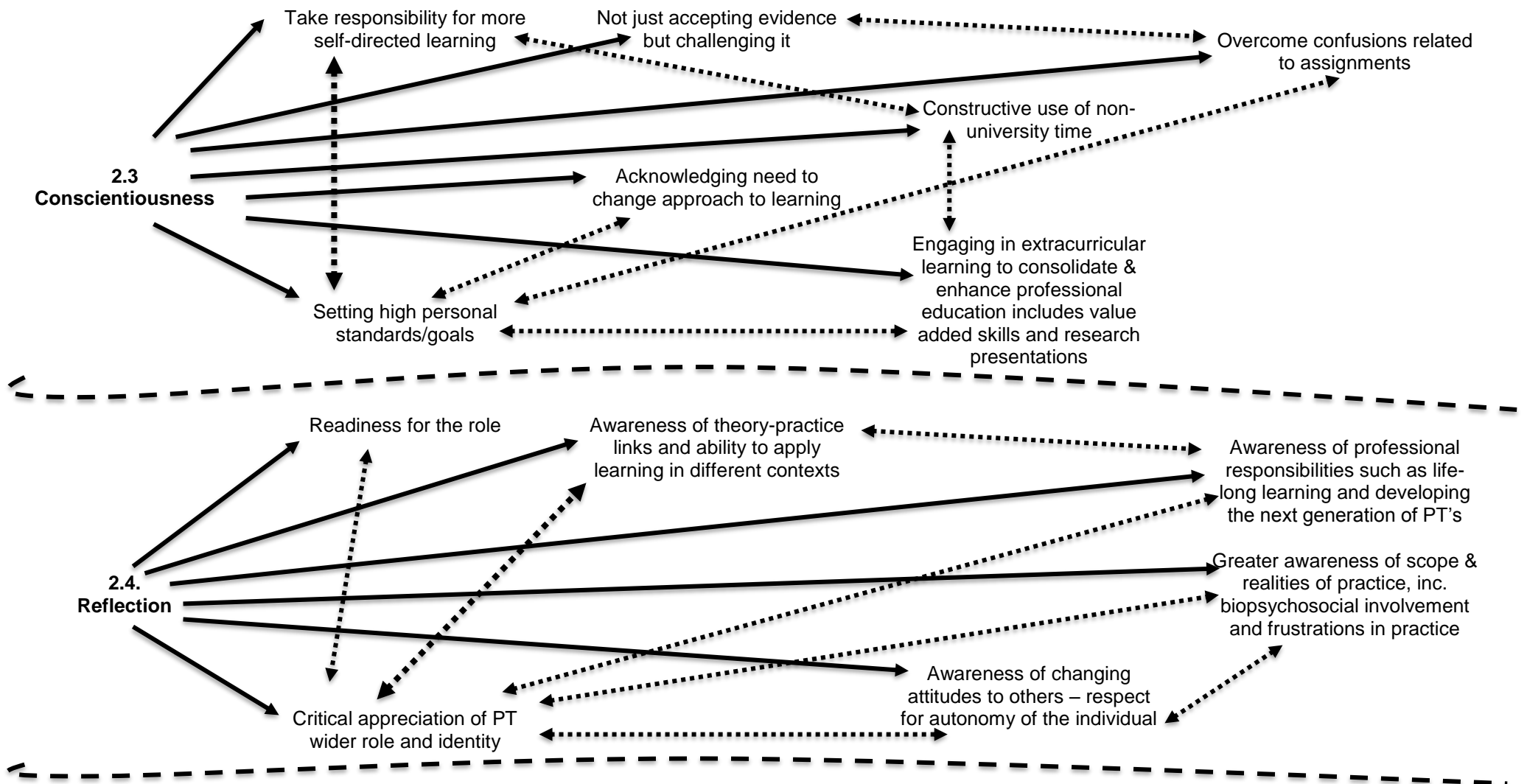
themes. As in the other phases, there was considerable overlap between themes with respect to the emergent personal characteristics. For example, 'attitude to learning' was related to enjoying a challenge, making meaning or making theory-practice links, which was best done in practice, often supported by clinical educators (interpersonal relationships) which in turn appeared related to expectations both of clinicians and participants themselves of working at a higher, near qualified level (resilience). During this phase, the personal characteristics were considered the primary themes rather than sub-themes emerging under certain conditions such as placement or exam time. As this was the final phase of interviews and represented a reflection not only on the third year but also on the programme overall, Figure 3.6, identifies how the developing physiotherapy identity emerges through the exploration of the participant's reflections on their learning journeys.

### **3.5.2: Thematic Framework (incorporating indexing and sorting and data summary)**

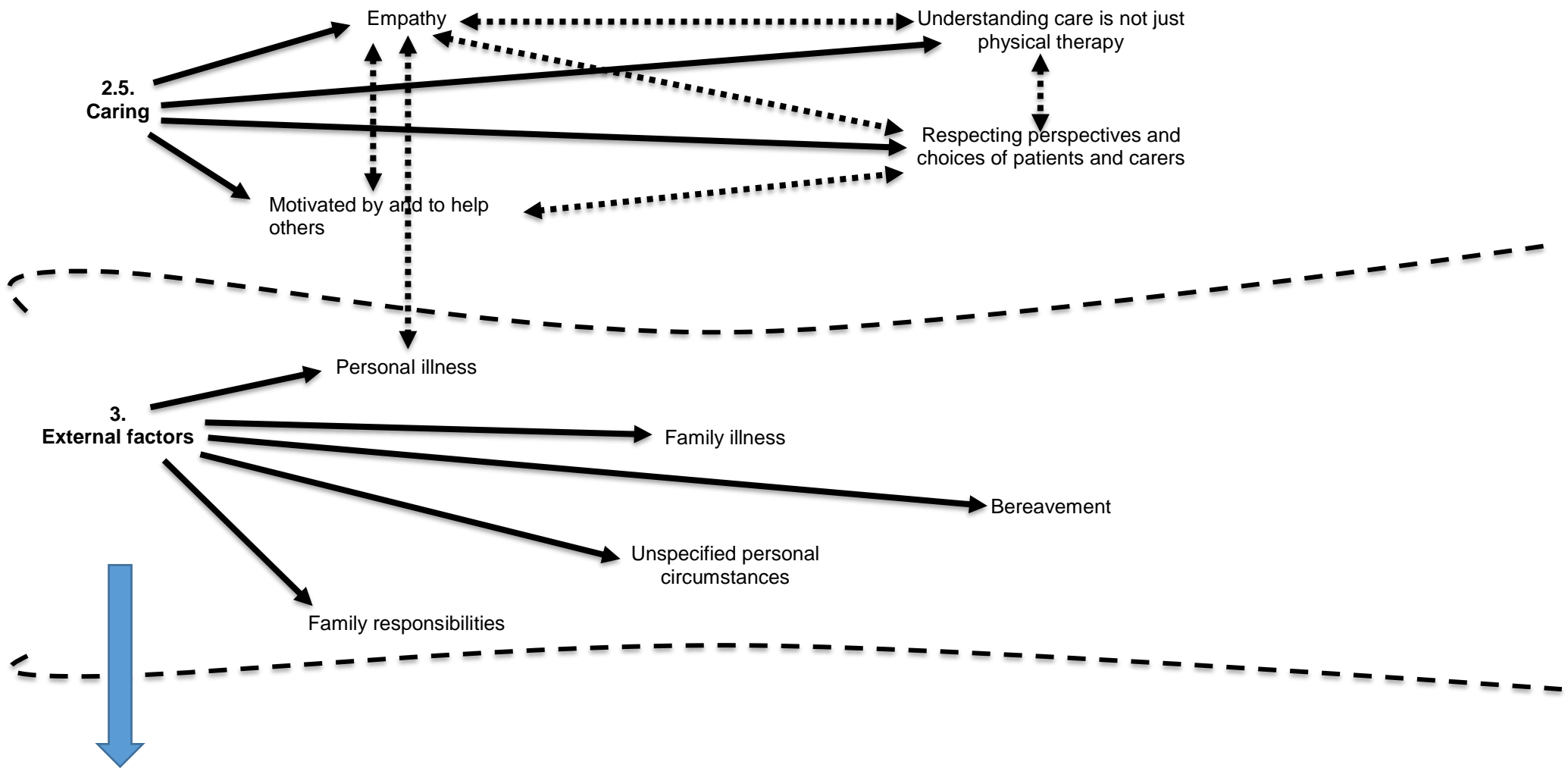
Through familiarisation, three main themes were formulated (the role of interpersonal relationships, personal characteristics; and external factors). The development of the thematic framework and the related processes of indexing and sorting and data summary (Figure 3.7 box 2, 3 and 4) followed a similar format to phases one and two produced matrices that displayed sub-themes that were essentially extensions of the first two phases, primarily relating to personal characteristics, with no new themes emerging.

Figure 3.6: Familiarisation with phase 3 transcripts









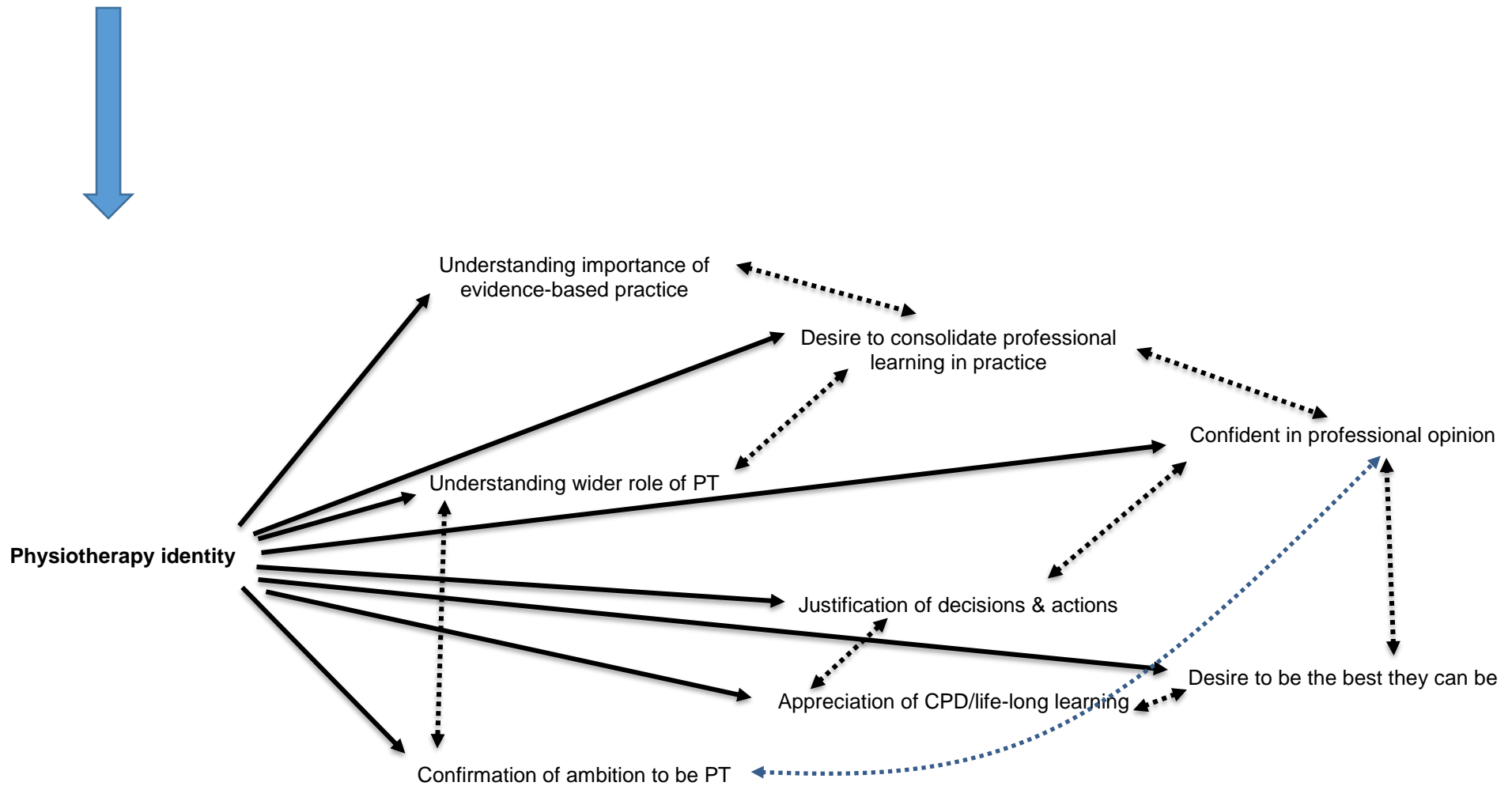
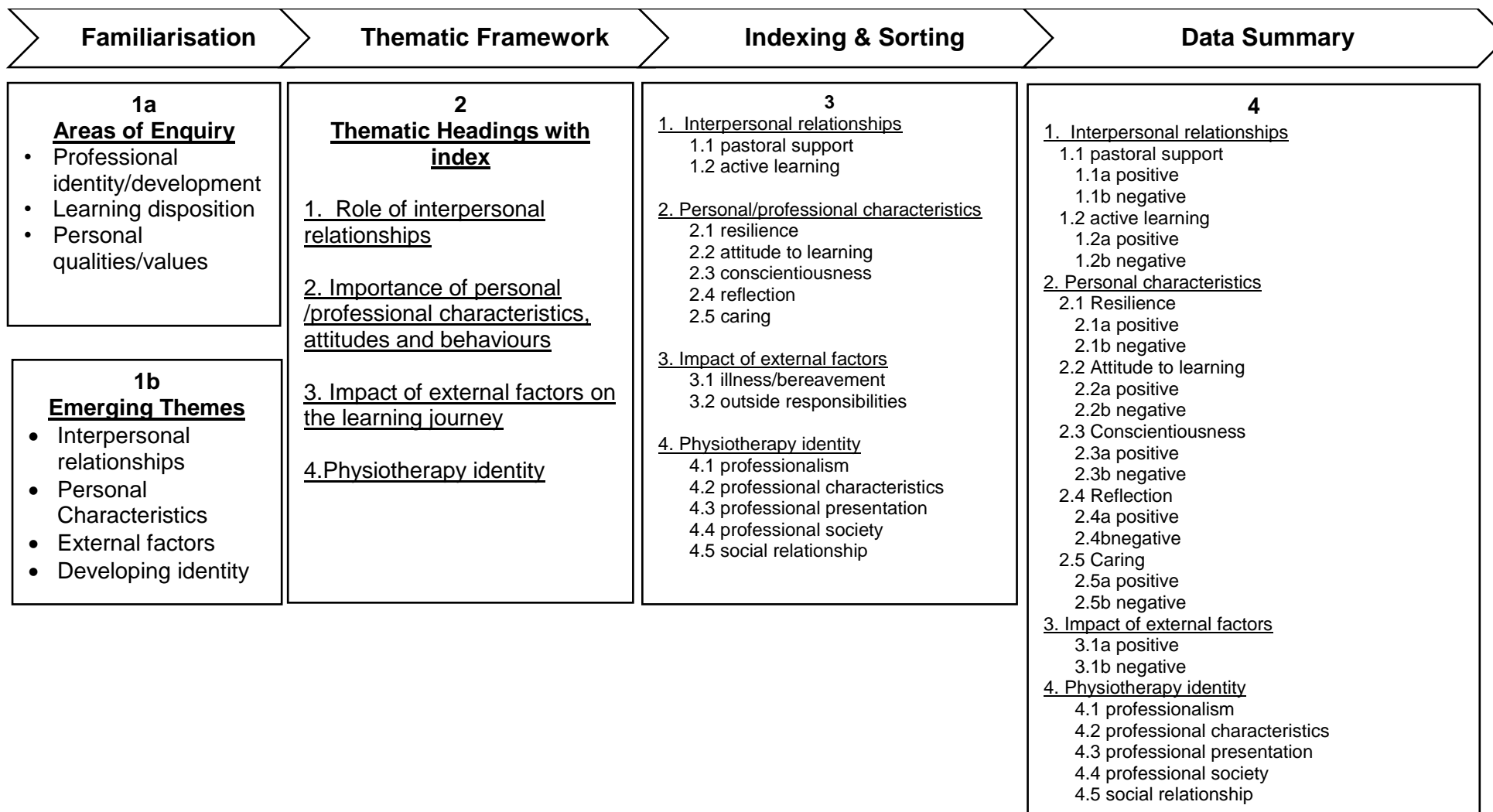


Figure 3.7: Example of the development of the thematic framework from Phase 3 Interview data.



### 3.5.2.1: The role of interpersonal relationships during the learning journey

Relationships with others, including academic staff, clinical educators, peers and family and friends has been important in facilitating the learning journey at each phase of the study, phase three being no different. These relationships have included general pastoral support and guidance. Even when it is not actively needed, the knowledge that such support is available is itself a support:

*“...I’ve had a lot of help and support and it’s better than what other people have had on other courses. I feel I’ve been very lucky it’s perhaps because everyone is a health professional by trade and understand the effects of illnesses, so I feel I’ve had quite a lot of support; and support that I haven’t taken but it’s been there and offered...”*  
(C1/S65/L1+).

*“...my parents have been my rock constantly throughout the three years, but I think with friends and family support and the staff support at the university has been really good; whenever I’ve been in hard times you feel you can contact a tutor, staff and that kind of faith within the students is really comforting and knowing that the staff do actually care; in university because our course is quite small you do get more of a connection, it’s a really nice atmosphere, really nice university actually to be in and be part of, it’s quite a strong team spirit...”* (C4/31/L2+).

Case 5 found personal difficulties with coming to terms with very ill young children she encountered on placement was not understood by her clinicians. This resulted in feeling unsupported, and the poor relationship engendered had a negative impact on her view of that particular speciality. Case 5 appears to appreciate at this stage of education expectations are higher, but there is no indication they tried to explain their difficulties with the educators:

*“...You just never think of children being that sick and then to be in an area where children are that sick for six weeks, they just expected a lot of you. I do understand we are third year, we are coming towards the end but I’ve never had babies and...I’ve never picked a baby up, I’ve never cuddled a baby, they just expected you to want to pick children up and know how to pick children and know how to turn them, it just wasn’t for me at all and I didn’t feel I had the support that I should have had on that placement, so it has put me off paediatrics which is a shame because not all paediatric placements are going to be in such an intense environment.”* (C5/S5/L3-).

The active learning on placement was particularly valued and often led to increased confidence, better understandings or making theory-practice links. It often appeared to reinforce the desire to be a part of the profession:

*“...light bulb moments on my final placements were making me realise that I do know stuff and my educators gave me such good feedback that it gave me the confidence to think I do want to be a physio, I’m going to be an alright physio and have confidence in my own ability...”* (C6/S5/L4+)

However, for Case 8, although feedback was good, personal conscientiousness left them dissatisfied with their last clinical placement performance:

*“...I got really nice feedback at the end of placement but I still feel that I could have done more, it could have been better, but they really praised me as to how I stuck at it and did well with all the stress and the work and things going on, they really praised me for that and they gave me some good feedback, but I could have done more and could have contributed more...”* (C8/S9/L7<sup>0</sup>).

Case 7 appeared to understand the potential value of working with peers and seemed somewhat envious of the active learning relationships experienced by others. They acknowledged their relationships were friendly; but as indicated in phase one and two, personal circumstances, family responsibilities and the need to work negatively affected the peer learning experience:

*“I remember the lecturer saying, “try and get yourself in a group”; I must admit I’m friends with everybody, but people were staying to do something and I’d have to shoot off. I saw one of the girls sitting with her papers and I thought I bet she’s gone through that with a group of girls, they’ll have all run through it, they’ll all know what they’re doing, probably it just takes more time that way, but you know I have friends here, but I haven’t done any study with them to be honest...”* (C7/S45/L1<sup>0</sup>)

### **3.5.2.2: The importance of personal characteristics**

The participants repeatedly displayed distinctive characteristics that influenced either positively or negatively on their learning journey. The manifestation of personal characteristics was most often displayed in combinations rather than singularly. For example, Case 1 appeared reflective, if lacking in confidence, indicated by their unbalanced view of the value of positive and negative feedback. They displayed resilience as they did not appear unduly upset by negative

feedback, and conscientious was implied by their viewing such feedback as an opportunity to improve:

*“...positive feedback is unexpected sometimes, so that obviously helps my confidence; when I get negative feedback I already expect it and often points to what I am aware of; but I find the negative feedback more helpful so I can make sure I don’t make the mistake again. With practical exams, negative feedback is ‘areas to improve’ and we always have areas to improve so I found the feedback helpful, there’s never been feedback that’s been negative for no reason it has a purpose.” (C1/S43/L1+).*

In a situation of uncertainty, such as preparing for a ‘decision-making’ presentation, Case 3 revealed a positive professional attitude. They identified the importance of tackling the challenge of working out the assignment requirements and engaging with the process. They dismissed complaining about the difficulties encountered, thus implying an attitude to learning that was both resilient and conscientious. They then were able to appreciate the underlying benefit of the task, which indicated reflection was also taking place:

*“...there was probably a week where people were a bit “what are we supposed to do here?” As part of the learning experience you figure out for yourself, do it for yourself and then getting the recognition was a good experience; and it’s exactly what we should be doing, it’s a decision-making presentation...and I realised the whole thing was one gigantic exercise in reflection, drawing everything together...” (C3/S19/L1<sup>0</sup>)*

Case 4, claimed they were not a natural academic but found her peers to be role models particularly in the first two years of study. However, they have been reflective on the best approach to tackling their dissertation. This resulted in a change of approach and utilisation of a previously unfamiliar learning environment, the library. This proved to be a motivational environment encouraging conscientious focus on the task:

*“...I never really used the library before until third year not because I didn’t take my assignments seriously it’s just because that third year bubble and everyone doing dissertations I thought “why shouldn’t I go to the library as well?” and I realised this is where I should be working, actually have people working all around you, that kind of motivated me to keep working, keep my head down. (C4/S15/L1+)*

Similarly, Case 6 admitted they did not find academic study came easily, but they did not shy from multiple tasks and diligently completed their module essays.

However, they acknowledged that on reflection they could have made the task easier with better planning:

*“...that dissertation comes at you before Christmas and its gives you time to mull things over, but maybe before Christmas I could have had more of a plan for my dissertation because that would have made me feel better once I’d done all these essays, to get going with my dissertation sooner, just to have more of a set plan I would have felt more confident...”* (C6/S9/L14<sup>0</sup>)

The same resilience to engage with challenging tasks was demonstrated by Case 9, who found the overall reflection required to pull his final presentation together was too much, as their personal resources were almost overwhelmed by the challenges:

*“...That final presentation a week after the placement was my worst mark, but I just ran out of steam by then. I came in every day, I was working in the evenings after placement, I just got overawed by what you had to do, I felt I had too much to do, too much to include and difficult to pull things out to illustrate what we were looking for in the presentation...”* (C9/S49/L2<sup>0</sup>).

Case 7 was similarly overawed by the tasks around Christmas, in which anxiety caused them to delay starting. However, the willingness to act on advice suggested personal resilience in the face of fear and some ability to reflect on possible consequences of not heeding good advice:

*“...I had the worse Christmas ever, because I had those [assignments] and the thought of doing them, suddenly I was suffering from anxiety in the last year because the dread of having to start and I had put things off, I remember someone saying “don’t put it off over Christmas”, so I did start...”* (C7/S23/L1<sup>0</sup>).

When personal circumstances occur, resilience and conscientiousness appear vital to managing challenging situations. Case 8 found semester one smooth, but was hugely challenged by the demands of semester 2, the situation worsened by unspecified personal circumstances. Their response was based on determination to achieve to the best of their ability, driven on by their enthusiasm for the profession and a tendency towards conscientiousness:

*“...determination is a massive part of it. I do things to be the best I can be, I don’t just go into stuff to pass it or just to do ok and that’s helped me get through; I’ve always been determined, even if I’ve not felt on-top-of-the-world I’ve always tried to give my best to*

*everything that I do; and enthusiasm, I really enjoy the profession of physiotherapy and wanting to become a physio is driving me through the last few weeks and thought of being a qualified physio is what's really helped me..." (C8/S19/L1+).*

Case 5 who had had a challenging learning journey through years 1 and 2 did not appear to have reflected on this particularly well. The result was a delay in preparing for their year 2 re-sit examination and an apparent lack of preparation for the increased challenge and expectation of year 3. There is a suggestion of doggedness in staying the course and passing, which could be viewed as resilience. However, there appeared to be a lack of self-awareness in learning from past mistakes, and an immaturity regarding a lack of conscientiousness:

*"Not ready at all [for year 3] the [elective] was like a holiday as well as a placement so [I] was relaxing, so I was thrown in again at the deep end. First year you come on the course and you get thrown in at the deep end, coming back into the third year I was doing the same all over again, having to revise things and I had one of the exams to retake from the second year so that was additional pressure on top of everything else; and it was just a bit of a rocky start to third year but I managed to pass it..." (C5/S3/L1<sup>0</sup>).*

The participants' attitude to caring had, throughout the programme, been focused on making a practical difference to others lives. Case 6 noted:

*"... [Physiotherapy] can affect anybody, it's not just for somebody who's got a sports injury, or somebody who's got a neurological problem; it can literally help anybody and change somebody's life so much..." (C6/S15/L8+).*

However, it is the impact of the therapeutic relationship that appears to have the most significant effects on the participants. This is beyond mere satisfaction of a job well done, but incorporates an emotional element:

*"...it's a great career to have; you get to have such an impact on people's lives physically, as well the emotional attachments. I've had patients that I have got very attached to, which I know you're not supposed to do, but you can't help it, and you're in situations where it is emotional and I find that really rewarding, and it develops you as a person as well..." (C4/S29/L9+);*

*"...I worked with that patient quite a bit, a lot of rehab on one-to-one, I just I kept looking back to see what he was like when he was in intensive care, to think he had no chance he was fitting, he'd had a stroke and there was nothing there and then I watched him get*



*discharged with his wife and he walked out, he walked functionally, just had a few problems with his memory, you probably wouldn't leave him boiling the kettle [laugh] but everything else, he was just great..." (C7/21/L1+).*

Placement raised the participants' awareness of the frustrations of working in healthcare. This is exemplified by Case 3:

*"... [On placement] there were things that I found incredibly frustrating, you're working so hard, some people don't show up and they don't realise how busy you are; and people telling you to your face, "so did you do your exercises?" "no"; "why not?"; "couldn't be bothered." and everyone complaining about waiting times "oh god, it was ages before I got to see a physio "that's because people don't show up"; and I found people could be so passive and I found that very frustrating that the first thing that you would always ask someone would be "so do you know what they [surgeons] did" and the answer 90% of the time was "no, not a clue" and you'd think "why did you sign the consent form?"; "why did you allow them to give you a general anaesthetic?" I learned so much from that..." (C3/S11/L19<sup>0</sup>).*

Despite the challenges of working with and for people in a healthcare setting, the overwhelming feedback from participants about their role was summed up by Case 8:

*"I've really enjoyed it, I love being on placement, I love the feeling of helping people, I don't think you get a better feeling if you have a patient and you can get them back to something that they want to do, or you can get them up and out the door. I don't think there is a better feeling I've found yet that you can replicate where you're helping a patient who is ill and getting better, that's a really big thing. I know I want to be a physiotherapist, I don't know what type of physio I want to be yet and that's part of the reason why sport is not for me because I want to do my rotations and see what else is out there, what else I can experience, what I can do, but I know that I want to be a physio, definitely..." (C8/S21/L1+).*

### **3.5.2.3: The impact of external factors on the learning journey**

Not all students reported the influence of external factors. Case 3, for example, reported, following the phase 3 interview, that a close relative had been diagnosed with a terminal illness. This was in the last few months before finishing their dissertation and final assignments. The close interview became a pastoral

guidance tutor interaction, during which the recording was stopped. However, the participant was in control of their emotions and able to discuss the practical actions in managing this issue. They had been visiting home (requiring a flight) and kept in regular contact. Despite the potential for distraction, their commitment to maintaining high standards and completing the programme was paramount. The support options available were discussed, but they preferred at this stage of their journey, to manage it in their own way. They thus demonstrated the integration of personal characteristics in a fully professional manner. Case 1 also experienced the terminal illness and subsequent death of a close relative. For them this required some time off university and delayed their degree completion by several weeks. However, despite the circumstances resilience and conscientiousness were demonstrated:

*“...all my deadlines went haywire cos my [close relative] died, so I had some time off, which was good for me; but then I hadn’t done very much so it made everything a bit more stressful, it all got compressed towards the end; but I managed to get my dissertation in before my placement, the placement started and my assignment happened at the start of placement and my presentation at the end, so it all got a bit smushed up.” (C1/S33/L1<sup>0</sup>).*

Case 8 found the semester two workload challenging, which was made worse by personal circumstances affecting their access to their normal family support network:

*“...the workload is still a lot and the issues with home were exacerbated by me being up in the uni house on my own so I didn’t have family to talk to and I was just letting it brew on an evening, so that was getting me down a bit; if the family were living up here I could have stayed at home, done placement and probably managed it a little bit better...” (C8/S11/L1-).*

Case 7, throughout the programme, had to balance studies with home life and work, which again illustrated a degree of resilience and an ability to cope with multiple pressures:

*“...we went out on placement I did a neuro placement which was full-on, it was so interesting and I found it tiring because it was early, we were on our feet all day, it was quite physical and then I was coming home and I had work to do as well on an evening; but I really got so much from that and then coming back in, I didn’t manage my time appropriately, getting it done and getting it sorted is really important because [of] added pressure of everything with life and university...” (C7/S7/L1<sup>0</sup>).*

Case 9 found placement challenging due to the birth of their second child. However, as with the other participants this was not offered as an excuse. Rather it was viewed as an additional challenge, albeit a joyous one, to deal with whilst persevering with the demands of the programme:

*“...I found it [CP5] quite challenging, but that’s often the case for that [MSK] environment anyway, I still enjoyed [it] but another reason was personal circumstances because we’d just had another baby so tiredness played a factor, but I still got a lot out of it, got a lot of really good tips and good information, but not as much confidence from it, which is probably no bad thing because it made me realise that you do need to put a lot of work in...” (C9/S7/L4<sup>0</sup>).*

Case 5 had struggled all through the programme and at the end reflected that their attitude and general approach should have been better. This suggested a potential for reflectivity, but unfortunately, they had not understood its importance to personal and professional development until it was too late:

*“I wish I’d pulled my finger out at the start, I feel like I’ve let myself down a bit, especially in second year because I knew second year was going towards our final degree and I really should have knuckled down then, but it’s taken me until third year to do that; so I’m a bit disappointed that I didn’t, but we all have to learn new things.” (C5/S37/L1-).*

#### **3.5.2.4: The Physiotherapy Identity**

Year 3 of the programme appeared to be when the participants consolidated their understanding of a physiotherapy identity. This was in terms of appreciating the breadth and diversity of the roles and responsibilities inherent in varying contexts of practice. It also encompassed an understanding of the nature of the learning journey they had embarked on, in terms of the academic, practical and professional development. Additionally, this was when they acknowledged the now informed desire to enter the profession and continue their learning journey as health care professionals. Case 1 appreciated why the journey had to be challenging and implies an understanding that the physiotherapists role goes beyond a biomedical or curative model of practice. They appear to appreciate clinical practice is an interactive and empowering relationship with service-users and other healthcare professionals and not a simple patient-expert interaction:

*“... [The degree] opened my eyes to what a physio is and the wider role of physio, their*

*role within a multi-disciplinary team, it's gradually gaining more momentum and the importance is being recognised more; I expected there to be less assignments but you understand why. They are around patient centeredness and safety and this is important working in the NHS, you have to meet criteria..." (C1/S53/L2+).*

Case 3 was also positive about the profession but implies it does not get the recognition it deserves. The implication is of caring about the profession, how it is perceived, respected and rewarded. This view was apparently shared with Case 8 who understands entering the profession is not with the expectation of great financial reward, but is very much related to career satisfaction. However, although acknowledging an attraction to the altruistic aspects of the profession Case 9, who has a young and growing family, pragmatically indicates the need to have a paying job:

*"...the more I've been exposed to it the more I realise that it is a great job, it is a great thing that we do and hopefully it will be something that should get a bit more respect..." (C3/S65/L1+).*

*"...physio is not a job you go into to earn the money, it's the satisfaction and the giving something back and being able to help out is something I've enjoyed from an early age...I just enjoy helping people, I like it..." (C8/S27/L1+)*

*"...when I first started I wanted to do it [physiotherapy] because I wanted to make a difference, I wanted to help people, now I've got a much more practical outlook, I've got a family which I started having when I started the course, which I didn't have when I actually left my job..." (C9/61/L3<sup>0</sup>).*

Cases 4, 5 and 6 acknowledge the transformative nature of the learning journey and in doing so identify the development of several key features of professionalism:

*"...this course has completely opened my eyes to what actually goes on in the health care system, how professionals work, team working; and my area interest is cancer and respiratory, which I wouldn't have thought physios were involved in at all until coming on this course; I don't recognise the person that I was whenever I came in to this course." (C4/S27/L2+);*

*“...I’m ready [to qualify] ask me in second year and I wouldn’t want to go anywhere [laughing] but now I’m ready, I need to be given independence, I need to be an autonomous practitioner and do it on my own, I need to make my own journey now, so I do feel I’m ready...” (C5/31/L1+);*

*“... [You develop] a mixture of practical skills and theory in university and being able to go on placement and apply that. I feel well-prepared and ready work in the real world and not be a student any more. I’m nowhere near being an expert in physio, but then I don’t feel like I’m a complete novice either, I feel I’m in the middle somewhere. That’s because of the course, it’s given you the skills and knowledge you need to get a good level of competence in different places and the only way that’s going to improve now is by spending more time in each area, do rotations and continuing to develop from feedback and continuing professional development to get better. The course can’t give you anything else, you’ve got to do a bit yourself, you can’t just expect to be a fantastic physio just because [you have] done this course, but it’s really helped to develop me.” (C6/S23/L1+).*

### **3.5.3: Abstraction and interpretation**

By Phase 3, the participants expressed personal characteristics were both easier to identify and recognise as professional characteristics. However, the characteristics, reflection, resilience, conscientiousness and caring, often manifested collectively. This had the effect of partially masking the relative importance of individual characteristics along the learning journey. These more developed characteristics became the main themes of the Phase 3 analysis. In addition, interpersonal relationships, a positive learning attitude and external factors were deemed significant contributors along the learning journey (examples are presented in Appendix 11). The relationship between the identified personal characteristics and the development of individual participant’s understanding of the scope of the physiotherapy profession was also an emergent factor.

Reflection, resilience and conscientiousness frequently overlapped. Case 4, for example, based on year 1 and 2 experiences realised a need to change their approach to completing their dissertation, suggesting reflection. The prolonged periods of intense study required to complete the task indicated conscientiousness and a degree of resilience. However, the acknowledgement that coping with challenges has facilitated their developed. This has resulted in the emergence of a more independent individual and a more “rounded person”. Their self-

awareness identified the transformative nature of the physiotherapy-learning journey and the appreciation of the maturation process. This maturation amongst several of the younger participants was in evidence. It manifested in more developed conscientiousness and resilience, taking personal responsibility and not looking to blame others, or circumstances for encountered difficulties.

The ability to draw on collective characteristics appeared to be more facilitatory to a successful learning journey than characteristics in isolation. Case 5 provides an example of a resilient individual. However, a combination of negative external factors in the form of several bereavements and the need to re-sit several assessments created challenges. These challenges in turn drew on their reserves of resilience. Although they did qualify and obtain a post as a physiotherapist, their journey was anything but trouble-free. Their ability to reflect effectively was questionable, as was conscientiousness. They did not appear to learn from previous experiences. However, they did recognise the transformative nature of the overall experience as facilitating “growing-up”.

Analysis of the data identified that learning journeys are rarely unchallenging and that smoothness is always relative. However, a relationship between managing challenges and personal characteristics emerged. At varying times on their journey, each participant displayed characteristics of resilience, reflection, conscientiousness, a positive attitude to learning and a desire to make a difference to the lives of others. The individual participants’ ability to manage challenges suggested the presence and utility of a combination of characteristics alongside a strong association with and for physiotherapy. There also appeared to be a positive attitude learning that included an appreciation of and attraction to ongoing or life-long learning.

By Phase 3, the participants had developed a more expansive understanding of the diversity of physiotherapy roles and expectations. Professional characteristics, such as a positive attitude to others (service users and colleagues) and to life-long learning were in evidence. Being reflective and self-aware was also evidenced, and where this characteristic was less utilised, or apparently absent, the result was a more difficult learning journey (Case 5) or failure (Case 2). Aspects of professionalism, such as respect for others, effective communication, autonomous practice and a clearer understanding of the physiotherapy professional society were demonstrated. There was an acknowledgement of how shared

characteristics, values and work practices enable an appreciation of the scope of physiotherapy practice and a sense of responsibility for its future.

A sense of ownership and awareness of the distinctiveness of physiotherapy was clear with all participants. The culmination of the learning journey developed a personal affiliation with the physiotherapy profession. Interestingly, Case 3 exemplifies this identification with the profession when referring to the positive role of physiotherapy. The connection to the profession is illustrated by the use of the phrase “the thing we do” (see Appendix 11, C3/S65/L1+). This suggests the personal “I” has merged with the professional “we” (see Figure 1.4) and the professional identity has now merged with the personal identity. The strength of the attraction to physiotherapy appeared a significant contributor to the drive to complete the degree. Those participants with a strong attraction and understanding of the demands and scope of practice appeared to utilise more of the positive personal characteristics more often and more successfully.

### **3.6: Summary of Findings**

#### **3.6.1: Year 1-Emergent personal characteristics**

Analysis of the data suggested proto-characteristics, identified through the recruitment process, emerged and developed towards recognisable professional characteristics during the learning journey (see Figure 3.8). The desirable characteristics identified through recruitment were, an indication of academic ability, a caring disposition, and an awareness of the roles and responsibilities of the physiotherapist. The transition into H.E. and the year 1 journey saw the emergence and elucidation of the desirable personal characteristics. These included reflection and self-awareness, the ability to look back critically and learn from mistakes, and acknowledge a personal role in both development and mistakes made. Conscientiousness was seen as a drive to succeed, take responsibility for decisions made and the resultant actions required. Additionally, it was related to planning and organisation, diligence, reliability, trustworthiness and a tendency to adhere to rules and shared values. Resilience was the extent to which the individual was stimulated rather than daunted by challenges. Resilient individuals acknowledged learning journeys were difficult at times and were therefore not intimidated or overawed when encountering challenges. Their ability to recovery from frustrations, difficulties or disappointments was swift.

Additionally, they acknowledged their mistakes, took responsibility and learned from them, often from critical feedback. The inter-relationship between these three characteristics is clear with respect to learning, responsibility and accountability.

A positive attitude to learning was displayed by individuals with a desire to learn who recognised this as a lifelong process from which they gained satisfaction. Learning challenge was viewed positively as an opportunity to improve over time. These individuals tended to adopt a deep learning rather than surface learning approach; and were critical about knowledge, wanting to reach their own conclusions. As a result, they tended to take ownership of and therefore an active role in their learning. In addition, positive social networks and peer group study support, with the associated interpersonal and communication skills, were seen as highly significant in supporting a successful journey. Further, they provided potential emotional support and reassurance, as well as affording opportunities for shared learning and development of learning approaches and strategies.

During year 1, few of the characteristics were expressed by the participants to the extent identified by the definitions. Naturally, among nine individuals there were ranges, with some participants displaying more formed characteristics than others, notably Case 3 and 9. The importance of the identified characteristics to the learning journey was often most obvious when they were limited or absent. Three cases, 2, 5 and 7 stand out as having experienced more challenged learning journeys. This was, in part, because they apparently failed to learn from reflection and their conscientiousness was questionable.

Negative factors also emerged in addition to limitations, or the absence of the identified characteristics. Negative external factors included homesickness, which could be considered a significant contributor to the negative experiences of some of the younger participants, notably cases 4 and 5. The resultant low mood and feelings of isolation appeared to challenge their ability to study effectively. For several participants a requirement to work and family commitments created a conflict of interest between continuing to contribute financially and socially to family life and the demands for study. For two cases 2 and 7, this conflict continued throughout their degree. It remained a barrier to forming peer study support relationships and was a distraction to learning.

Immaturity was a factor that may have contributed to feelings of homesickness,



but it also manifested in other ways. Some participants appeared to hold the belief that the transition into HE did not require any additional change of approach from them. Neither did they recognise they might need support to facilitate the transition. However, when things went wrong, there was a general tendency to take responsibility and not to blame others. These tendencies were more apparent amongst the younger participants, however, not exclusively so. One mature participant struggled to identify the cause of their difficulties and did suggest others, or external circumstances may have contributed to this.

Health issues are unforeseeable circumstances that can challenge student's abilities to cope and to study successfully. These may affect the student themselves as with cases 1 and 6. However, they can be just as devastating when the health issue affects a relative or significant friend, for example cases 7 and 9. Such circumstances challenge the developing study and coping strategies and negatively impact on learning. Additionally, the participants experienced feeling down, were distracted from learning, and time management suffered. In cases of bereavement, the participants experienced grieving, distraction from learning, and interference with managing learning requirements. Negative external factors may have overwhelmed the ability of individuals to utilise the desirable personal characteristics. This in turn may have, for some, contributed to a more challenged learning journey.

### **3.6.2: Year 2-Developing professional characteristics**

Progression into and through year 2 saw the desired personal characteristics developing towards more recognisable professional characteristics. This process appeared to be based on building on year 1 experiences, together with greater exposure to professional expectations through an emphasis on the application of theory to practice and more clinical placement exposure. Those participants with more developed personal characteristics, for example cases 3 and 9, appeared well equipped to manage the increased academic and placement challenges. The ability to learn from both positive and negative experiences and value both positive and negative feedback implied maturity but also the development of characteristics towards more recognisably professional. Once again, the apparent absence of the characteristics illustrated their importance. For example, a limited ability to learn from experience and from critical feedback ultimately led to the withdrawal of Case 2 from the programme.

The caring characteristic appeared more refined as year 2 progressed.

Participants demonstrated understanding of their personal & professional role in enhancing the well-being of others. They also, in most cases, began to recognise that interactions with patients and clinical colleagues are unique, requiring social and cultural sensitivity. Thus, they were demonstrating health care professional values.

Immaturity remained a factor that may have contributed to the ongoing homesickness of Case 5. However, some participants, for example cases 4, 5, and 8, once again failed to recognise the increasing demands and expectations of year 2. They therefore failed to recognise the associated requirement for a modified approach from them to manage this. This resulted in poor academic performance of failure in some of the semester 1 modules. However, as year 2 progressed the attitude to learning generally, became more positive, active and deep. This was reflected in sharing learning tasks and making theory-practice links. There were some exceptions notably cases 2, 5 and, to an extent, 7.

Interpersonal relationships continued to be important from a social support perspective providing welcome distractions from the intensity of the learning experiences; and offering emotional support. It was in year 2 that peer study support developed towards more collaborative learning with associated emotional support. Where participants failed to develop this, academic performance suffered and the learning experience was less enjoyable. This was exemplified by cases 2, 5 and 7. The relationship with academic and particularly clinical staff gained increasing importance. This was not just in facilitating theory-practice development; but also in providing roles models, or exemplars of professionalism & professional values & conduct. When these relationships were perceived as poor by the participants, the result was a changed attitude to the profession itself. Two young and immature participants, cases 4 & 5 considered leaving the degree because of a perceived poor student-educator experience.

### **3.6.3: Year 3-Recognisably professional characteristics**

The progression through year 3 was marked by participants having to respond to the challenges of level 6 academic study and the raised clinical expectations of working towards qualified professional status. For the remaining eight participants the desirable personal characteristics had generally become more refined towards

recognisable professional characteristics. Reflection had generally become more critical and balanced in which consideration of experiences was more an analysis of strengths & weaknesses. There appeared an improving ability to learn from positive & negative experiences in order to make meaning of theory-practice understandings; and to consolidate the individual participants understanding of what a physiotherapist is. This latter point was facilitated by positive interpersonal relationships primarily with clinicians.

Conscientiousness manifested as a personal striving for excellence, which included being diligent, responsible and accountable. The associated demonstration of planning and organisation to achieve tasks, alongside being conversant and compliant with requirements/rules/values related to professional role and concepts of professionalism outline in Figure 1.1. Resilience again appeared to take on the professional view that encountered challenges and difficulties are a natural part of life, but they should not interfere with the professional role. There is almost a separation emerging between the personal and professional life, with the professional beginning to take precedence. It should be noted this was a trend amongst the participants, with some displaying more fully developed professional characteristics compared with others.

Caring however, was more universally recognisable as a professional characteristic. There was towards the end of year 3 and much clearer appreciation of scope of practice and of the expected standards of conduct and professional values. Caring, as a concept also encompassed other healthcare professional as well as service-users and their carers. The attitude to learning generally continued to be positive with a clear recognition of a requirement for and commitment to continuing professional development (CPD).

Limitations to, or absence of, some of the desirable characteristics again illustrated their importance. However, it became more apparent during this phase that the presence of several characteristics and the ability to utilise them interchangeably contributed to a less challenged and more successful learning journey.

This was exemplified by Case 3 who had illustrated maturity and all the desirable characteristics from phase 1, and their clear development towards recognisably professional characteristics by phase 3. Case 5, by comparison, displayed immaturity throughout their journey. Apart from a tenacious resilience, they

appeared unable to consistently and fully utilise reflection or demonstrate conscientiousness. As a result, their degree experience was a rollercoaster journey from one challenge to the next setback, without apparently learning from their mistakes.

The consistent feature amongst all the participants was their caring attitude and appreciation of the profession and its expectations. In all cases, the participants were more appreciative of the scope of physiotherapy practice, understanding of the standards and values expected and enthusiastic towards the role and continuing their development journey. This demonstrated the emergence, during the degree-learning journey, of a professional identity congruent with their personal view of themselves.

**Figure 3.8: Summary of study findings**

<b>Factors contributing to a positive learning journey</b>		
<b>Phase 1 (year 1) Emergent characteristics</b>	<b>Phase 2 (year 2) Developing characteristics</b>	<b>Phase 3 (year 3) Recognisably professional characteristics</b>
<ul style="list-style-type: none"> <li>• Attraction to physiotherapy - proto-physiotherapy identity based on pre-course investigations</li> <li>• Reflection/self-awareness - to look back &amp; learn from mistakes, acknowledge personal role in development &amp; mistakes</li> <li>• Conscientiousness - managing workload challenges</li> <li>• Resilience - managing difficulties encountered during transition into HE</li> <li>• Caring - making a practical difference to the lives of others</li> <li>• Attitude to learning - positive, active, making meaning with existing knowledge</li> <li>• Interpersonal relationships <ul style="list-style-type: none"> <li>○ Social support networks - facilitate settling into new learning/living environment</li> <li>○ Peer study support - active sharing of learning</li> <li>○ Academics/clinical educators - support &amp; role models</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Developing physiotherapy identity - influenced by clinical placement experiences</li> <li>• Reflection/self-awareness - learning from increasingly diverse academic &amp; clinical experiences</li> <li>• Conscientiousness - manages increasing academic &amp; placement demands, &amp; self-manages to meet deadlines</li> <li>• Resilience - managing increasing academic/ placement challenges, give-it-a-go attitude, combat negative emotions &amp; bounce back from disappointments, beginning to appreciate similarities &amp; differences between social, academic &amp; clinical tasks &amp; environments</li> <li>• Caring - more refined understanding of personal &amp; professional role in enhancing well-being of others &amp; that interactions are unique, requiring social &amp; cultural sensitivity, beginning to recognise health care professional values</li> <li>• Attitude to learning - positive, active &amp; deep approach, sharing learning tasks, making theory-practice links</li> <li>• Interpersonal relationships <ul style="list-style-type: none"> <li>○ Social support networks - distraction &amp; emotional support</li> <li>○ Peer study support - emotional &amp; learning support</li> <li>○ Academics/clinical educators - theory-practice development/role models, exemplars of professionalism &amp; professional values &amp; conduct</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Well-developed appreciation of physiotherapy roles &amp; responsibilities &amp; strong affinity for the identity.</li> <li>• Reflection/self-awareness - critical &amp; balanced consideration of strengths &amp; weaknesses, ability to learn from positive &amp; negative experiences</li> <li>• Conscientiousness - striving for excellence, diligent, responsible &amp; accountable, able to plan &amp; organise, conversant &amp; compliant with requirements/rules/values related to professional role</li> <li>• Resilience - accepting challenge &amp; difficulties are natural part of a learning journey &amp; stimulated by such challenges, ability to recover from disappointments</li> <li>• Caring - appreciation of scope of practice &amp; standards of conduct &amp; proficiency &amp; professional values, caring encompasses service-users, carers &amp; fellow health professionals &amp; students</li> <li>• Attitude to learning - positive attitude, ability to learn on own &amp; as part of a group, understanding of requirement for &amp; a commitment to CPD</li> <li>• Interpersonal relationships <ul style="list-style-type: none"> <li>○ Social support networks - well developed</li> <li>○ Peer study support - well developed</li> <li>○ Academics/clinical educators – viewed as role models &amp; colleagues, ability to identify professionalism</li> </ul> </li> </ul>

Factors contributing to a negative learning journey		
Phase 1 Emergent characteristics	Phase 2 Developing characteristics	Phase 3 Recognisably professional characteristics
<ul style="list-style-type: none"> <li>• Limitation/absence of characteristics above, plus mismatch between understanding of physiotherapy identity and reality of academic and placement experiences</li> <li>• External factors <ul style="list-style-type: none"> <li>○ Homesickness - feeling down &amp; isolated</li> <li>○ Requirement for paid employment - distraction from study, interference with development of learning strategies</li> <li>○ Family commitments - distraction from study, interference with development of learning strategies.</li> <li>○ Health issues <ul style="list-style-type: none"> <li>▪ Self - challenged development of coping strategies &amp; ability to maximise learning opportunities</li> <li>▪ Others - feeling down, distraction from learning, negative impact on time management</li> <li>▪ Bereavement - grieving, distraction from learning, interference with managing learning journey requirements</li> </ul> </li> <li>○ Immaturity - belief that entering H.E. does not require personal change, requirement for increased support, others to blame when things go wrong</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Limitation/absence of characteristics above collectively or singly, plus increasing divergence between perceived physiotherapy identity &amp; experiences on the learning journey.</li> <li>• External factors <ul style="list-style-type: none"> <li>○ Homesickness - becoming less of an issue but still presenting feelings of low mood and isolation</li> <li>○ Requirement to work - distraction</li> <li>○ Family commitments - distraction</li> <li>○ Health issues <ul style="list-style-type: none"> <li>▪ Self - challenge &amp; overwhelms coping strategies, could lead to suspension of studies</li> <li>▪ Others - feeling down, distraction from learning, negative impact on time management</li> <li>▪ Bereavement - grieving, distraction from learning, interference with managing learning journey requirements</li> </ul> </li> <li>○ Changes to family circumstances - additional challenges to address, distraction from learning &amp; interference with learning strategies</li> <li>○ Immaturity - inability to identify increased level 5 expectations demanded personal change &amp; greater acceptance of personal responsibility &amp; some sacrifice of social life.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Limitation/absence of characteristics above, plus divergence between perceived physiotherapy identity &amp; the reality gained during authentic learning experiences &amp; engaging in the professional role</li> <li>• External factors collectively or singly, <ul style="list-style-type: none"> <li>○ Requirement to work - distraction</li> <li>○ Family commitments - distraction</li> <li>○ Health issues <ul style="list-style-type: none"> <li>▪ Self - challenge to coping strategies, disruption to learning approaches, planning &amp; organisation &amp; interference with learning</li> <li>▪ Others - feeling down, distraction from learning, negative impact on time management</li> <li>▪ Bereavement - grieving, distraction from learning, interference with managing learning journey requirements</li> </ul> </li> </ul> </li> </ul>

## CHAPTER FOUR: DISCUSSION

### 4.1: Introduction

The aim of the study was to identify if students experiences during their learning journey indicated the presence of personal characteristics, which influenced progression? Additionally, in the presence of recognisable characteristics, the aim was to conceptualise the positive or negative role each may play through their physiotherapy degree programme. The literature identified the desirability of personal characteristics for prospective and registered healthcare professionals (Edgar, Mercer & Hamer, 2014; Boak, Mitchell & Moore, 2012; HPC, 2011a; Unsworth, 2011; Parry *et al.*, 2006; Ryan, McCormack & Cleak, 2006; Gottlieb & Rogers, 2002; Guffey *et al.*, 2002). Following the publication of the Francis Report (2013) into the failings of the Mid-Staffordshire NHS Foundation Trust the Governments response was to initiate Values Based Recruitment (VBR) into both the NHS and to health and social care education and training institutions (HEE, 2014; Work Psychology Group & HEE, 2014; DH, 2013). Greater understanding of what personal characteristics contribute to a successful learning journey can pave the way for more focused recruitment approaches and ultimately fulfilment of the Governments VBR strategy for the health and social care professions.

Of the 44 individuals who consented to take part in this study, five subsequently withdrew or suspended studies, which included one of the final selected study participants. This represents a non-continuation rate of 11.36% of the cohort, although it is noteworthy that two of those individuals returned to the programme with the cohort below them and completed their degrees in June 2016 (thus the actual non-continuation rate was 6.8%). Liz Thomas (2012, p.5) cites the average non-continuation rate for English higher education institutions in 2009-10 as 8.4%, varying between 1.2% and 21.4%; with the average completion rate estimated to be 78.4%. Not counting the two returners completing in 2016 the completion rate for the study cohort was 93.1%. Programme non-continuation and completion rates, whilst not investigated specifically in this study, may be considered broad qualitative indicators of the extent of challenge experienced by students through their learning journey. This is also true for academic entry tariff and its relationship to performance. Once again, this was not specifically investigated in this study but the information was included in the secondary participant data and thus worthy of brief consideration. Academic entry route did not appear to be an influencing

factor with mixed entry and non-standard entry achieving equally with the standard entry students. This observation agrees with the findings of Hatt and Baxter (2003) who also reported no significant difference in performance based on academic entry routes. It further supports Green and Waterfield (1997) who stated there is no link between academic performance and job performance. Although it is unequivocal, that prior academic success is a requisite for recruitment and is a factor in academic progression. However, actual progression is most likely related to the individuals' attitude to learning rather than simply the academic entry route onto the programme and prior attainment.

The study envisaged that individuals were attracted to a nascent or proto-professional identity during their pre-course investigations. A proto-physiotherapy identity was conceived by this study as a process, beginning with a tentative association between the title Physiotherapy and an aspect of the profession that had meaning for the individual. This may be running onto a pitch and applying a 'magic sponge', or treating people with back pain, or delivering massage. The attraction is personal and if strong, at this early stage, may lead to further investigation including, reading about the profession, attending university Open Days, and undertaking observational work experience/s. Such activity broadens and deepens the understanding of the profession and, if the attraction remains, or is enhanced, then an application to undertake an education programme may follow. The participants initial concept of the profession was developed and either confirmed or rejected through the learning journey, based on individual experiences. This proto-professional identity of physiotherapy appears synonymous with a traditional identity that Hammond, Cross and Moore (2016, p. 72) identified as being held by novice physiotherapists as "a fixed asset". They identified it as relating to a concept of role, image portrayed and the ethics of practice. For those attracted to 'magic sponge' treatment in sport, continued attraction to physiotherapy is enhanced or degraded by authentic learning experiences during the programme. The traditional notion of the identity as a fixed asset is partially encourage and maintained through the registration and professional bodies, the HCPC and CSP respectively, publication of 'Standards of Conduct Performance and Ethics' (HCPC, 2016) and 'Code of Members' Professional Values and Behaviours' (CSP, 2011).



However, a fixed notion of professional identity is challenged by set review dates for the aforementioned 'Standards' documents, suggesting ongoing change. Most telling is the Government's health policy set out in the Department of Health (2010) white paper, which points to requirements for increased efficiency, improvements in quality and better patient safety. The Francis Report (2013) and the Department of Health's (2013, p. 1) mandate to Health Education England is to recruit NHS and public health staff with the "*right values*" and desire to provide high quality compassionate care central to their professional activity. In addition, there is a requirement for all health and social care professions to undertake a critical re-examination of their activities and underpinning values (Hammond, Cross & Moore, 2016). The continuing evolution of a professional identity, even over the relatively short period of a three-year degree programme may challenge the perceptions of students. In turn, this could lead individuals to question whether the attainment of a professional identity is sufficient reward for coping with and overcoming the programme challenges encountered.

The attraction to a particular professional identity is a cognitive, social and affective process. It sees the established "*I*", the personal identity (although this may not in itself be fully established until late adolescence or early adulthood) is transformed into the "*we*" of the professional identity as the bounds of that profession are experienced and explored (Hatch & Cunliffe, 2013; Jenkins, 2008). The bounds of a profession may incorporate its purpose, the image it portrays, the roles performed and the underlying values held and expressed. The way individuals attain their identity is likely related to their personal identity style. Berzonsky (2008) and colleagues (Berzonsky & Kuk, 2005; Berzonsky & Ferrari, 1996) identified that younger individuals were more likely to adopt a normative identity style associated with conforming to the expectations of others. Older individuals tended to adopt an informational style, associated with exploratory and reflective characteristics (see Figure 1.3).

The findings from this study are in partial agreement with Berzonsky with two mature participants both reporting poor placement experiences in year 2. Despite this, they were able to draw positive learning and development opportunities from the apparently negative experiences. However, younger participants also reported negative placement experiences, based on the lack of a bond with their educator. Rather than reflecting on the overall learning experience, the perceived poor

relationship caused them to question their ambition and future commitment to the profession. This suggests mature students are more resilient through, and have a greater ability to reflect on, negative experiences whilst retaining a wider perspective of what they want to achieve overall. Put simply, they are able to put it down to experience and move with the education programme. However, it would appear that younger students dwell on negative experiences more, resulting in a detrimental impact on their confidence, causing them to question whether they are in the right profession. These observations demonstrate the importance of two characteristics resilience and reflection that appear to influence progression and the attainment of the professional identity.

Whilst the findings did agree with Berzonsky's identity styles model (2008) as reported above, areas of contradiction were also observed. Another mature participant, who experienced several poor placements, received negatively critical feedback in the process and was both upset and apparently unable to take any positive development from this. This was interpreted as, in striving to conform, their failure overwhelmed their resilience, and they struggled to utilise reflection to understand why they were not doing well, or work out how to rectify this. The further implication being, that the development of a professional identity is closely related to personal characteristics. When certain characteristics are limited or absent, learning, development and the formation of identity is challenged.

The findings of this study identified six personal characteristics related to learning journey progression and the acquisition of a physiotherapy professional status. These characteristics are reflection, resilience, conscientiousness, caring, a positive attitude to learning and an ability to form interpersonal relationships. The implication is that in recruiting for health education programmes, and health and social care posts, consideration must be made of the characteristics required for a given professional role. It is by understanding which characteristics are recognisably professional and influential in learning journey progression that recruitment will fulfil the Francis Report (2013) and the Department of Health's (2013, p. 1) mandate to Health Education England is to recruit NHS and public health staff with the "right values".

## **4.2: The emergence of personal characteristics**

### **4.2.1: Personality (conscientiousness and resilience)**

Personality has been defined in numerous ways by various researchers creating difficulties in attempting to delineate the specifics of the concept. However, despite the differences some commonality exists suggesting individual uniqueness can be categorised along dimensions or continuums of personality, which combines cognition, emotion and behaviour. This leads to the emergence of an essentially stable or enduring set of dispositions related to specific needs or drives (Wilde & Williams, 2015; Work Psychology Group, 2014). The uniqueness of personalities, the way individuals think, make life choices, act around other individuals and behave when they work together has been the subject of research for many years. This area of research has informed this study with respect to defining the identified characteristics and conceptualising their role along the learning journey. Two broad beliefs have emerged, 'type' approaches and 'trait' approaches.

The former is largely based around the work of Carl Jung (1875-1961) who proposed and developed the concepts of extroversion and introversion types (Wilde & Williams, 2015; Encyclopedia Britannica Online, 2015; Goodman, 2013; McCrea & Costa Jr., 1989). Isabel Briggs Myers and her mother Katherine Briggs developed the work into the Myers Briggs Type Indicator (MBTI). The MBTI has become a popular tool, especially in the area of professional recruitment and career progression, to explain the personality characteristics of individuals. However, this is a distortion of its intended utility of self-understanding and development rather than a tool for others to make judgements about the individual (Briggs Myers, 2000). Although it has some vehement critics, even they see merit in the tool as being, in some measure, effective (McCrea & Costa Jr., 1989). Indeed, Tyssen *et al.* (2007) used a 'type' model to investigate Norwegian medical students' ability to cope with stress. They found combining personality traits into types was a promising tool to identify a profile of students' termed 'brooders'. These students displayed low extroversion, high neuroticism and high conscientiousness, and were considered at risk of the negative effects of stress and would benefit from specific support (Tyssen *et al.*, 2007). The observation was supported by this study with one participant displaying a similar combination of traits with the addition of self-awareness. They found, when due to undefined

circumstances they lost their normal support network, the last few months of year 3 became particularly challenging and stressful. Despite the MBTI acknowledgment of the dynamic and multifaceted nature of personality, the type approach was not used in this study to conceptualise the identified characteristics.

Rather, the alternative 'trait' approach was utilised, which considers personality as a stable set of characteristics. These are ways of thinking, feeling and behaving which vary between individuals and distinguish the individual's uniqueness, but are relatively predictable for each person. Although numerous models have been posited over the last 50 years or so, the five-factor model (FFM) has emerged as the most widely accepted personality descriptor template. Parks and Guay (2009) believe the FFM currently to be the best representation of the dimensions of personality. Additionally, Johnson (2014) identified its broad utility in subjects as diverse as understanding anxiety and depression, competitiveness, health behaviours, job performance, leadership style and team performance amongst others. Further, is cited by the Work Psychology Group (2014, p. 8) as important when deliberating on assessment tools for VBR (Wilde & Williams, 2015, p.373; Brocklebank, *et al.*, 2015; Fleeson & Jayawickreme, 2015; Hilbig *et al.*, 2015; Steel, Schmidt & Shultz, 2008; Clancy Dollinger, 1995). Therefore, this model was used to conceptualise and therefore define the identified personal characteristics.

The FFM posits five broad dimensions of personality, namely openness, conscientiousness, extraversion, agreeableness and emotional stability. Each dimension represents one end of a continuum with closed, unreliable, introversion, antagonistic and neuroticism at the opposite ends (See Appendix 12 for descriptors of each trait). Traits are shaped by the culture in which the individual is reared and the pervasive moral values of the role models involved directly in that rearing (McCrea & Costa Jr, 1997).

The trait approach and the FFM in particular, is not without criticism. Jack Block (1995 & 2001) has been particularly critical of the apparently empirical nature of the model, questioning which FFM to use, as there are several versions. He further questions the "method, logic and interpretation of findings" (Block 1995, p. 207). Robert McCrea (2001) counters this by arguing that no meaningful or persuasive criticism has emerged and far from the contention empirical studies have yielded nothing of importance, he states they have made significant contributions to the study of traits into a broader understanding of personality.

One of the most damning critics has been Walter Mischel, who amongst other criticisms categorically stated that behaviour is not cross-situationally consistent (Wilde & Williams, 2015; Roberts, 2009; Mischel, 1973). Roberts *et al.* (2007) and Roberts (2009) reviewing the research literature soundly refuted most of Mischel's criticisms. However, cross-situational inconsistency of behaviours was somewhat more problematic and for many represented the proof of traits questionability as a valid construct. Yet, in a counter criticism Wilde & Williams (2015) and Roberts (2009) state Mischel's work itself was based on work subject to methodological weaknesses and mostly conducted in laboratory situations. They suggest personality behaviours are more likely to be influenced by real-life situations, which are individually meaningful, and context specific and thus behaviour consistency was never germane to trait concepts. For example, in this study on several occasions, participant's natural tendency to be caring was challenged by the need to fulfil their physiotherapy role and work very ill or injured patients extremely hard. The presence of a trait does not mean acting robotically regardless of the context. Rather, it is behaving in a meaningfully (to that individual) consistent manner, thus behavioural inconsistency is integral to the trait concept.

A relative consensus exists that personality is a holistic construct of reasonably enduring patterns of thoughts, feelings and behaviours formed through a complex interaction of physical, psychological and social systems. These traits, or characteristics, cause individuals to behave in specific ways under specific circumstances. Therefore, offering opportunities to assess for the presence or absence of desirable/undesirable traits in specific contexts. However, this requires an understanding of which traits are most desirable in a given context (Wilde & Williams, 2015; Mayer, 2015; Carver & Connor-Smith, 2010; Roberts, 2009; Roberts *et al.*, 2007).

In this study, the characteristic conscientiousness was conceived as a drive to succeed, taking responsibility for decisions and actions. It was also considered synonymous with planning and organisation, diligence, reliability, trustworthiness and a tendency to adhere to rules and shared values (Richardson, *et al.*, 2009; Carver & Connor-Smith, 2010). This trait was observed in all but two participants in striving to attain the personal goal of becoming a physiotherapist, with those ultimately successful participants reporting satisfaction in achieving a

physiotherapy identity by the end of the study. Resonance with the FFM definition of conscientiousness is clear, but also appeared related somewhat to extraversion, particularly with respect to ambition and sociability. These observations are similar to those of Poropat (2009) and Richardson *et al.* (2009) who noted, conscientiousness was found to be a particularly strong trait amongst health care workers and was associated with diligence, academic performance and career satisfaction.

A recognisable facet of conscientiousness, the drive, or determination, to achieve well, was identified throughout this study. However, for the majority of participants, it appeared to develop through the learning journey from a broad will-to-achieve in phase 1, to a characteristic in phase 3 resembling a professional striving for excellence. This observation supports Richardson *et al.* (2009) who identified a narrow personality trait of work drive as being significantly more prevalent amongst health care workers. These findings support the conception of conscientiousness, as envisaged by this study, as synonymous with motivation for working and willingness to go-the-extra-mile. Specifically, with respect to health care workers, the often rule bound nature of the roles and the need for professional standards compliance seems to favour the trait of conscientiousness.

Interestingly, the narrow personality trait of customer service orientation was found by Richardson *et al.* (2009) to be lower for health care workers compared to others. The DH (2010) places great significance on service-user's experiences of health care. This is because of a relationship between service-user satisfaction, patient health outcomes and enhanced employee engagement and satisfaction. If considered an extrinsic development of professional identity it requires further investigation as a possible characteristic requirement for a customer service orientation for all healthcare professions. However, this study counters Richardson *et al.* (2009), as customer service was clearly in evidence throughout, but most closely resembled the caring characteristic as conceived by the study. Amongst the participants, this was demonstrated by a desire to make a practical difference to people's lives by striving to meet their goals. There was agreement with Richardson (2009, p. 224) that this characteristic was also related to aspects of "agreeableness", with respect to nurturing, being helpful, empathetic and altruistic. Thus, service-user satisfaction appeared synonymous with patient happiness.

Although this study was not investigating the influence of prior academic achievement on progression, one participant epitomised the underlying position of this study that personal characteristics are more valuable in predicting a successful learning journey. This mature individual was the most academically qualified participant in the study, had work and managerial experience and had successfully run a business for several years. This does not suggest a lack of academic or intellectual ability, or an individual lacking in conscientiousness. Rather, it indicates someone struggling to balance the continued requirement to work in support of their family, with the demands of a challenging degree. Kasworm (2008, p. 28) suggested mature learners enter education to reinvent themselves, or to provide a more stable future for themselves and their families. This latter point was true for three of the mature participants, but for two it appeared to lead to a fraught journey, in which they had a diminished sense of their identity as learners.

The facets of conscientiousness related to organisation, planning and strategic awareness were at fault for several participants. For the participants required to continue with paid employment, it appeared earning money was only a partial factor, of equal importance was their struggle to give up their previous working life status. This was related to the enjoyment and fulfilment gained from that role, but also may have indicated a possible conflict between their personal and previous professional identity and the expectations of their intended new professional identity. Indications of this were, self-reported not fitting in with their cohort, or an inability to become established with a study group based on having little in common with them. The shared goal and experiences to becoming a physiotherapist did not factor into their justifications for remaining on the periphery of the cohort. As exposure to authentic clinical learning and professional role models increased, some participants appeared conflicted by the professional expectations and their development performance. The issue appeared to emerge as a perceived lack of belonging with the cohort, possibly the institution, but ultimately with the profession (Thomas, 2012, p. 7).

A perceived lack of conscientiousness and a challenged learning journey was not restricted to mature participants. One young participant who experienced a particularly challenged journey implied the issues surrounding conscientiousness were different. The negative impact of homesickness was acknowledged

throughout the first year particularly, compounded by the emotional impact of several bereavements over the study period. However, conscientiousness was certainly questionable, a point the participant themselves conceded, but implied they drew on other resources to succeed, namely resilience. Despite this, they graduated and were one of the first in the cohort to gain a physiotherapy post. Therefore, the presence of conscientiousness, and its components, appears desirable for its contribution to a positive learning journey and as one expression of professionalism but it appears not to be individually essential.

Another characteristic that emerged was resilience. This was conceived by this study as a give-it-a-go attitude underpinned by an acceptance that challenge is part of life and learning and therefore not to be too intimidated by it. Additionally, when difficulties or disappointments arise, resilient individual's recovery swiftly. Resilience equates with tenacity and taking responsibility for mistakes made and learning from them. It underpins the ability to cope with and manage challenges or stresses.

Resilience appears highly relevant to successful progression through a physiotherapy degree programme and onwards into a PT career. HSCP's must be equipped to cope with super-complexity, the ability to deal quickly and confidently with numerous, rapid, varied and very often contradictory expectations (Barnett, 2007, in McCune & Entwistle, 2011, p. 303; Deakin Crick, 2007, p. 136). Such expectations contribute enormously to the difficulties and challenges individual practitioners face. The multiple and often competing demands range from the individual's own daily events, such as keeping up with household tasks, handing in course work on time, to major life-events, such as marriage, birth of a child, or bereavement; and to the diverse demands of their specific professional role (Banyard, *et al.*, 2015). All the participants encountered some or all of these challenges. The literature identifies the responses of individuals to such events also varies from being overwhelmed, to others who appear to react well, remain positive and even thrive in the most demanding of circumstances (Fletcher & Sarkar, 2013). Again, the participants in this study demonstrated a broad spectrum of responses.

A debate has arisen around whether resilience is a personality trait, or a process utilised in response to adversities (stressors) (Fletcher & Sarkar, 2013; Waaktaar & Torgersen, 2010). Personality traits have been conceived as psychological



resilience providing protection from adversities and include resourcefulness, strength of character, flexibility in functioning, high energy, optimistic, curious, ability to detach, hardiness, positive emotions, extraversion, self-efficacy and self-esteem (Fletcher & Sarkar, 2013). This view has been challenged on the basis that as personality is relatively fixed, it cannot explain how some people use a range of coping strategies, or how coping varies in different contexts and over-time.

This has led to the counter view that resilience is a developmental process in which positive adaptation to life's adversities is learned through person-environment interactions. It requires cognitive processes and reflections to enable the individual to make sense of their positive or negative responses (Fletcher & Sarkar, 2013). However, as previously suggested personality behaviours are influenced by real-life experiences and are thus individually meaningful, context specific and therefore, never robotically consistent (Wilde & Williams, 2015; Roberts, 2009). Responses will relate to the extent the individual is able to draw on their personal characteristic resources, such as resilience, at any given time, under any given circumstance.

An emerging view of resilience combines aspects of both the trait and process views. It considers resilience as a combination of psychological processes (cognitive and affective) and resultant behaviours to support personal assets, furnishing protection to the individual from the negative and damaging effects of stressors (Robertson *et al.*, 2015; Fletcher & Sarkar, 2013). From the perspective of this study, resilience has been perceived to have a relationship with improved well-being and increased goal achievement. A health professional learning journey, which encompasses both preregistration education and post-registration continuing professional development, is particularly demanding. The expected range of academic, practical and interpersonal knowledge and skills to acquire and ways and contexts of learning are myriad (McCune & Entwistle, 2011; Deakin Crick, 2007). 'Stick-ability' to the task, the hallmark of resilience and achievement of the physiotherapy professional learning goal is a vital dimension of learning power. This aspect of resilience, termed, "*dogged*" by one participant, was very noticeable amongst most participants. Although for some, this requirement was learned from bitter experience, academic disappointment, or failure which they mobilised a resilient response.

As suggested previously characteristics such as resilience may be most effective when combined with other traits. For example, Ross, Canada and Rausch (2002) demonstrated individuals with resilience and high conscientiousness displayed less self-handicapping strategies. Self-handicapping is a means of reducing personal responsibility for poor performance by adopting a negative approach to learning, including failing to study, revise or practice. This was supported by the findings of this study related to one participant who repeatedly indicated a poor ability to bounce-back from disappointment. In addition, they struggled to learn from difficult experiences, and demonstrated self-handicapping behaviours by stopping studying. Such responses suggested a lack of resilience and deficits in some facets of emotional stability, reflection, conscientiousness with respect to competence, and self-discipline (Ross, Canada & Rausch, 2002).

The positive relationship between resilience and high conscientiousness linked to a general ability to cope with stress, suggested by Vollrath and Torgensen (2000) was not straightforward in this study. The study findings were in broad agreement, however, one participant, whose conscientiousness had developed remarkably through year 2, became challenged and stressed towards the end of year 3, threatening their ability to cope. They reported feeling they had dropped their high standards simply to doggedly complete the required tasks. Ironically, they achieved their best marks and thus the loss of conscientiousness, for them relating to excellence, may simply have been a perception rather than reality. However, the observation adds weight to the notion of a combination of characteristics facilitates a positive outcome at stressful times, but not without significant costs to the individual.

Robertson *et al.* (2015) implied recruitment based on the presence of certain characteristics, including resilience, had the potential for improved individual and work-based productivity. This could also lead to a healthier and more engaged workforce, with clear benefits to both employers and employees. Kiernan, Proud and Jackson (2015) suggested nurses balancing family care responsibilities with their education displayed high levels of resilience, an observation supported generally in this study. However, it was confounded by one participant whose apparent lack of resilience contributed to their having to withdraw from the programme, and thus supporting the views of Robertson *et al.* (2015). These observations suggest resilience is a desirable characteristic and one demanding

closer investigation in relation to recruitment for HSCEP's. However, there is also the suggestion that the process element of resilience may be amenable to focused training that could be incorporated into the curriculum (Bíró, Veres-Balajti & Kósa, 2016, p. 190).

#### **4.2.2: Values (conscientiousness and resilience)**

Concepts of human values (what is desirable) is of increasing interest to those investigating social interactions and individual motivations and behaviours. There is uncertainty whether the relationship between individual behaviour and social interaction is general or specific. This is because some values appear to relate to some behaviours only in some social contexts. However, interest in this concept stems from the belief that values are a conduit between the self and the wider society (Parks & Guay, 2012; Cheng & Fleischmann, 2010; Parks & Guay, 2009; Bardi & Schwartz, 2003). Values can be considered a learned set of criteria used by individuals to evaluate other people (including themselves) and interactional contexts. They enable the individual to select and justify actions taken in those contexts (Schwartz, 1992).

Within the considerable and often conflicting body of research on this topic, Shalom Schwartz and colleagues value theory has been well-developed and therefore become particularly dominant and widely used (see Appendix 13 & 14) (Parks & Guay, 2009; Parks & Guay, 2012). Values have been defined in numerous ways, but a broad summation of these recognises them as a set of relatively enduring concepts, criteria or beliefs. Each individual holds beliefs relating to what is desirable in life, or in behaviour. They transcend specific situations; guide selection and evaluation of behaviours and events; and exhibit a hierarchy of importance to that individual, meaning what is important to one person may be unimportant to another (Schwartz & Bilsky, 1987; Schwartz, 1992, Schwartz, 1994; Schwartz & Boehnke, 2004; Cheng & Fleischmann, 2010; Parks & Guay, 2012; Work Psychology Group & HEE, 2014).

Values initially are learned as absolute social norms, for example "always tell the truth". This occurs through interactions with key role models such as parents and wider family members, friends, teachers, cultural/religious leaders. This is demonstrated by the presence of similar value patterns within cultures and communities, considered shared values. Such values are passed between the

members of that community and to the next generation (Ravlin & Meglino, 1987; Schwartz, 1992; Meglino & Ravlin, 1998; Parks & Guay, 2012; Work Psychology Group & HEE, 2014). This also explains the relative stability of cultural values over time. There appears to be a relationship with personality, as well as a link to personal identity, and a developing professional identity. That relationship may be related to the influence of role models and the individual consideration of similarities and differences. This aspect was identified during this study with clinical educators particularly influential both positively and negatively.

Potential problems arise when learned values are accepted by the holder as universally good. This confounds decision-making when choices between values have to be made. Therefore, overtime, again through a learning process of social interaction, but in varying experiential/contextual situations, values develop into a hierarchy as individuals are forced to choose between them. For example, the conflict between always telling the truth and the ethical clinical and research requirement of non-maleficence, doing no harm. This challenges the absolute 'goodness' of values requiring reflective choice so that relationships are not jeopardised (Ravlin & Meglino, 1987; Parks & Guay, 2009; Parks & Guay, 2012).

The greatest period of values development occurs during childhood and into adolescence, becoming relatively stable by adulthood (Parks & Guay, 2009). However, because of the learned nature of values, exposure to new social environments and contexts can alter the individual's value structure. Such exposure includes university attendance, engaging in professional education and training, or beginning a new job. The resultant developed values become stable because the individuals have invested something of themselves in acquiring the new attachments (Ravlin & Meglino, 1987; Meglino & Ravlin, 1998; Parks & Guay, 2009; Cheng & Fleischmann, 2010; Parks & Guay, 2012). This was clearly observed during this study, in which most participants acknowledged the transformative nature of their experiences both personally and professionally.

Parks and Guay (2009, p. 676; 2012) describe two models of values; 'values as preferences', or work values and 'values as principles', or personal values. The former essentially relates to individual preferences for specific environments and attitudes to such things as career choice and job/career satisfaction. This could be considered related to professional identity; as such, values are likely acquired through professional exposure and socialisation. The latter are considered guiding

principles. Gard and Thrane Sundén (2003, p. 63) refer to them as 'life-views', or a lens through which individuals comprehend their world. In doing so they determine the personal response to reality, which influences their decision-making and interactions with other individuals.

Personal values or life-views could be considered analogous with personal identity. Both are developed through rearing; but may also be influenced by, for example, professional role model exposure. This allows for more critical evaluation and comparison of a professional identity with the individual's personal identity. Other researchers have referred to such values as 'oughtness' to denote the fundamental nature of personal beliefs in how that individual should conduct himself or herself (Ravlin & Meglino, 1987; Meglino & Ravlin, 1998, p. 354). It has therefore been hypothesised that personal beliefs should affect motivation and behaviour more than values as preferences. This is because preferences are essentially attitudes, or how one feels about something, such as satisfaction. The findings in this study imply the importance of preferences depends on the extent to which an individual subscribes to the physiotherapy identity (Ravlin & Meglino, 1987; Meglino & Ravlin, 1998; Bardi & Schwartz, 2003; Parks & Guay, 2009; Parks & Guay, 2012). This in turn appears to be influenced by the extent to which the experienced learning journey matches personal beliefs. For example, caring, synonymous with making a practical difference, appeared to be a generally shared characteristic, which equated to a sense of oughtness for the participants.

Both personal and work values may be aspects of the comparison of similarities and differences utilised during identity development. In their study comparing the life-views of physiotherapy, nursing and medical students Gard and Thrane Sundén (2000) found the majority had high humanistic (every human-being is of equal value) ethical values and were all patient-centred. These ethical values appear synonymous with 'Universalism' and 'Benevolence' in Schwartz's (1994, p. 22) value theory. In their follow-up study, investigating only physiotherapy students (2003), they found patient-centeredness was unchanged over time; but quality of life had become generally more important than life itself. More than 50 per cent of the students felt their life-view had changed through their educational experience. As a result, they were more tolerant and ethically aware; interestingly seventy-five percent of those reporting a life-view change were under twenty-six years of age. This observation was supported by the findings of this study, in

which one participant stated: so long as healthcare professionals have done their best, then the death of a patient is unfortunate, but not a failing of care. Several other participants also expressed changing values that treating patients who initially presented as too ill to survive was not only valuable but enabled those patients to walk out of hospital. This, making a practical difference to the lives of others, was a significant aspect of the caring characteristic displayed by participants in this study.

The suggestion that values are, to an extent, malleable may only be in situations where the starting point, between existing and new values is in broad agreement. In this case, the shift towards the new professional position may be viewed more as refinement, or development, rather than a true change of values. This makes sense when accepting professional identity emerges as the end-point of weighing up the similarities and differences between personal and professional values. In this study, physiotherapy role models were very important for all participants in the motivation to continue with the degree or leave and supports Gard and Thrane Sundén's (2000) observations. Values are less well formulated amongst the young adults at the beginning of their university education, but are modulated and refined through professional role-model exposure.

For mature students whose personal identity is likely to be well established, the blending with the new professional identity can be traumatic. Exposure to various aspects of the professional role can challenge long held attitudes, values and behaviours. In this study, authentic placement experiences in intensive care, for example, challenged beliefs and coping strategies of participants with respect to the professional role in treating severely ill/injured patients. They were forced to rationalise efficacy on patients, sometimes, with little hope of recovery, and yet the possibility for improvement kept them going. For others, the adoption of physiotherapy professional characteristics, including values and associated behaviours appeared hugely challenging, especially during year 2. This was where expectations of applying profession specific knowledge in the clinical setting were raised. The inability to identify the requirements, values and behaviours, needed for clinical success, or successful management of the stressful clinical situation, ultimately led to confusion, dissatisfaction and/or withdrawal from the programme.

The personal characteristics deemed most important by this study manifested as recognisable personality traits as previously discussed, however, they were also recognisable as values. This observation supports the contention developed during this study that personal characteristics emerge because of interaction between personality and values. Conscientiousness, previously discussed in relation to personality, appeared also related to the 'achievement' value, or personal success through demonstration of competence, which is associated with capability and intelligence. Participants exemplified this by striving, not only to achieve academically, but also to demonstrate their ability to apply knowledge and clinically reason, particularly to their clinical educators. This hints at the development of, or alignment of, personal values with professional values and the need for participants to demonstrate this alignment with their professional role models. The relationship with the 'stimulation' value domain was implied by participants being excited by challenges and variety; and with 'self-direction' by being independent and curious (Schwartz, 1994, p. 22). The conscientious characteristic was, as previously suggested, in evidence amongst all successful participants. Clearly, such a characteristic and its associated facets would be beneficial for physiotherapy students where uncertainties and problem solving are everyday occurrences. It could therefore, be considered a success characteristic on the learning journey with independence and curiosity hallmarks of autonomous practice, which is *"the ability to make decisions and act independently"* (CSP. 2011, p.17).

Indeed, by phase 3 of the study, conscientiousness, as a professional characteristic was recognisable as working within their scope of practice to the best of their ability. This appreciation of a shared value relates specifically to the professional principle of striving to achieve excellence (see Figure 1.2). It also suggests an awareness, albeit possibly subconsciously, of the professional society and social relationship related to their developing physiotherapy status (see Figure 1.1). All the successful participants recognised that future clinical experiences would not only consolidate learning but would enhance their professional development. For those, who had tended towards a more superficial learning style, they could be accused of lacking conscientiousness. However, by phase 3 they all clearly appreciated and appeared eager to forge their own future learning journey, suggesting self-direction, independence and curiosity.

Considering values as individual preference goals, selection and effort expended to attain the goals (goal striving) must be based on individual motivations, or the level of importance the individual attaches to attainment. In the context of this study, this is conceived as the extent to which the individual identified with the physiotherapy identity. There is an obvious influence from individual personality traits as stable and enduring characteristics. These, in turn, dictate the extent to which the individual perceives goal achievement, and legitimises consideration of both values and personality in understanding personal characteristics displayed by physiotherapy students progressing towards the goal achievement of a physiotherapy identity (Work Psychology Group, 2014).

Resilience was another characteristic in evidence throughout the study, with a clear link to the personality trait 'emotional stability'. It was repeatedly demonstrated by participants when managing challenges. However, there were manifestations of resilience that directly related to values of personal achievement in which the individual's ambition was balanced by self-respect (Schwartz, 1994). Therefore, when ambition was threatened, responses varied from drive on regardless, work harder, or simply take negative criticism on the chin and move on, in order to manage a difficult situation and preserve self-respect. The ability to manage and overcoming challenges appeared to legitimise the individuals' presence on the programme, enhance confidence in personal abilities and confirm their affinity with the physiotherapy identity.

#### **4.2.3: Reflection**

Reflection, for many years been considered, not only desirable but also, an essential characteristic of a competent healthcare professional. It has been viewed as important in improving the quality of patient care, and is therefore an expectation of professional and regulatory bodies (Smith & Trede, 2013; CSP, 2012; CSP, 2011; Mann, Gordon & MacLeod, 2009; Ladyshevsky & Gardner, 2008; Ward & Gracey, 2006; Wessel & Larin, 2006; Clouder, 2000; Donaghy & Morss, 2000). Reflection has also been considered a learning strategy, equipping the individual practitioner to engage in a deep cognitive relationship with real-world contexts. Additionally, it facilitates the connections and integration of new learning to existing knowledge and skills. It is considered particularly useful in clinical practice to be able to integrate the affective aspects of learning in the environment



where the professional role is experienced and developed (Mortari, 2015; Mann, Gordon & MacLeod, 2009).

In this study, reflection was conceptualised as a form of knowledge production based on focused attention on personal thoughts and memories in order to make sense and learn from them. The insights from the critical attention to experiences would thus inform everyday actions enabling the individual to make contextually appropriate changes as indicated (Bolton, 2014; Taylor, 2010; Alvesson & Sköldberg, 2009). It was therefore considered a personality characteristic related to openness to experience and conscientiousness; to values theory related to achievement, self-direction and universalism; and learning power theory related to changing and learning, critical curiosity and meaning making. With respect to physiotherapy, reflection has been described as the 'new orthodoxy' (Clouder, 2000, p. 517). It is considered an aspect of the professional image with associations to higher intellectual abilities (Clouder, 2000). The work of Schon on 'reflection-in-action', during clinical activity and 'reflection-on-action' as a post-clinical activity process has influenced physiotherapy education (Clouder, 2000, p. 518). It reinforces that physiotherapists need to be able to both think during professional interactions as well as afterwards and undertaking a paper exercise of reflection to evidence the process (Clouder, 2000).

The requirement and emphasis on the individual thinking about their own thinking (self-appraisal) and recording these as written reflections has led to criticism. This intimates reflection can become a monological activity, with limited opportunity to confirm the veracity of thoughts and grow as a result. However, by accepting the professional society potential of reflections shared with, and guided by experts, individual and professional development is possible. This may be particularly valuable when working in multi-professional teams. The appreciation of different approaches and values is paramount for successful interprofessional working. However, it is important for the individual to understand how their own profession functions within this environment (Smith & Trede, 2013; Mann, Gordon & MacLeod, 2009; Clouder, 2000; Donaghy & Morss, 2000). An additional benefit was demonstrated by Masui and De Corte (2005, p. 365) in which the concluded reflective training led to improved academic performance amongst a group of year one university students.

Throughout this study, all participants implied self-awareness and experiential reflectivity to some extent, some of the time. However, there was no uniformity or consistency in how it was manifested. Two mature participants were arguably the most reflective individuals from the outset of the study. They consistently demonstrated self-awareness and a mature ability to learn from both positive and negative experience. Younger participants however, implied self-awareness and reflection was a developing process, with year 1 and moving into year 2 highlighting difficulties understanding the insights gained and how best to utilise them to facilitate their learning journey. Several struggled with the raised programme expectations for year 2, approaching it with a more-of-the-same attitude, thus creating challenge when it could have been avoided. However, the fact all successful participants demonstrated improved reflectivity moving through year 2, and into year 3 implies the malleability of the characteristic through education.

The study did find two anomalies with respect to this last point. The first was exemplified by a participant who repeatedly demonstrated an inability to engage actively with reflection. This was despite detailed written feedback, personal tutor support and attempted shared reflection activity supported by educators. This resulted in a loss of confidence, the emergence of self-handicapping behaviours and a perceived lack of belonging (Thomas, 2012; Ross, Canada & Rausch, 2002). Another participant illustrated a different aspect, but equally potentially aberrant relationship with reflection. They repeatedly illustrated looking back on challenging experiences; however, they did not appear to learn from them. Personal acknowledgment of for example a lack of planning, or leaving it late to start an assignment or revise for an exam did not result in changed behaviour throughout the programme. The implication is that education can introduce the reflective process to the learner, emphasise its importance to learning and development, and offer examples how to undertake reflective activity. However, if it is not a personality characteristic, whilst the value may be perceived it is unlikely to be utilised to maximum benefit until the individual makes the cognitive link this is positive for them.

Once again it is much too simplistic to state the characteristic was absent in these two examples. Indeed, both demonstrated self-awareness and at least a partial use of reflection on some occasions and it is difficult to conceive in their comparing

positive and negative experiences with those of their peers they did not question why they repeatedly had the lowest marks or struggled on placement. The implication is once again that characteristics are composites of a number of factors, and/or that a number of characteristics must be utilised together to facilitate the learning journey. In these examples, drawing on facets of conscientiousness, including scrupulousness and purposeful-striving, or tapping into the values of achievement and self-direction; or the learning power of changing and learning, critical curiosity and strategic awareness may have overcome the deficit in reflective ability. Unfortunately, if associated facets are missing or less well developed the individual is less likely to be able to maximise the learning opportunities.

In accepting the transformative nature of education, it must also be considered that when students fail to grasp an important concept or requirement for that learning journey the teaching itself may be questionable. During this study, several participants reported the teaching of reflection was sometimes too complex and did not focus on developing the natural tendency of students to reflect. This point was previously identified by Smith and Trede (2013) who suggested approaches to teaching reflection tended to over-emphasise the written process at the expense of the learning and developmental possibilities of good critical reflective practice. However, by the end of the programme, the majority of participants demonstrated both an understanding of, and ability to, critically reflect to recognise both strengths and weaknesses. This supports the previous contention that for the majority, even if they do not initially appreciate the value of reflection to learning, by year 3 they utilise it in a recognisably professional, critical manner and thus demonstrate educational transformation.

#### **4.2.4: Caring**

Entering a caring profession implies caring characteristics should be apparent, but the concept of caring itself is multi-faceted. For healthcare professionals the notion of caring is implicit in the term itself, and tacit, that all individuals entering a healthcare profession are naturally caring (Clouder, 2005). However, caring in the professional sense is hugely complex and difficult to define (Beckett, 2013). It has been identified as one of the desirable personal characteristics that defines healthcare professional behaviour (Greenfield, 2006; Clouder, 2005). Indicators of caring, as conceptualised by this study included, empathy, cultural and diversity

sensitivity, ethical behaviour; being non-judgemental, non-discriminatory or non-oppressive. Additionally, being an advocate for patients and embracing the patients physical, emotional and psychological care needs in order to make a difference to their lives, emphasises the holistic nature of the profession (HCPC 2016; Edgar, Mercer & Hamer, 2014; Beckett, 2013; HCPC, 2013; Bradley, 2013; Boak, Mitchell & Moore, 2012; CSP, 2011; HCPC, 2009; Greenfield, 2006, Verma, Paterson & Medves, 2006; Clouder, 2005).

Over recent years, concerns have been raised and evidence produced of failings in care (Francis Report, 2013) with a key aspect being a lack of compassion (Beckett, 2013). Beckett (2013) implicated the nursing profession as most culpable in appearing uncaring. The reason for this was because they ostensibly focused on performing their role, they were not focused on the person they were nursing. Whereas, physiotherapy was deemed more caring by providing individualised and holistic care. The difficulty in understanding the concept is due to its dual nature as a moral or ethical endeavour, whilst also being an occupational requirement (Beckett, 2013; Greenfield, 2006).

Clouder (2005, p. 507) identified four aspects of care beginning with 'caring about'. This may be considered recognising care needs, and is largely addressed through health professional education. 'Taking care of', requires individuals to take responsibility for the identified needs and work out what to do about them. This leads onto 'care giving', which is fulfilling the professional role. Finally, 'care receiving' relates to the patient's response to the care received. These last two aspects alter the focus of caring and therefore the relationship between caregiver and receiver. There is a challenge to the traditional view of the caregiver delivering effective and efficient solutions to the patient's clinical problems. This is emphasised by a refocusing of healthcare towards empowering and self-management strategies thus alters the relationship between the physiotherapist and patient. Here the physiotherapist is not the expert director of the management strategy, but rather the facilitator of a shared approach to treatment to meet mutually identified goals. The patient's response to this can destroy or legitimise the individual physiotherapists caring identity. The suggestion is the first two aspects represent practical professional caring, often one of the factors attracting individuals to the profession initially. This aspect of practice can be bolstered and confirmed with positive 'care receiver' feedback. This in turn provides the clinician

with job satisfaction and a boost to their self-esteem. In addition, it upholds the attribution of a desirable moral character to that individual, but reinforces it as a professionally recognisable characteristic (Clouder, 2005, p. 508).

However, clinical practice experience exposes clinicians to complex dilemmas and challenges of balancing a range of conflicting needs and requirements. For example, institutional policy requiring patients be treated in specific ways, within a tight timeframe and/or are bio-medically focused (on the pathology and solutions to the clinical problems). Novice practitioners and students particularly, can find such approaches counter to their inclinations and development as patient-centred practitioners. They may also be surprised by the expectation to adopt a dispassionate manner with their patients. Similarly, they may be shocked that not all patients can be helped; and surprised and frustrated by those patients who do not engage with their treatment, or who do not wish to be treated (Clouder, 2005).

At the beginning of this study, the majority of the participants expressed their caring characteristics in terms of the 'taking care of' and 'care giving' aspects. For all, this was about making a positive difference to people's lives. However, several found the reality of practice challenged them, made them uncomfortable, or challenged their natural inclinations. Being exposed to critically ill patients in the intensive care highlighted the reality that some patients, regardless of professional input will not survive. For some participants this was deeply upsetting and counter to their proto-physiotherapy identity of returning patients back to their pre-morbid state. Authentic clinical experiences forced participants to confront the fact that making a difference sometimes meant offering advice and support, being an advocate and a sensitive listener to their patient's issues and even supporting a 'good' death through pain relieving measures and emotional support to the patient and family. Making a difference in these contexts involved both different skills and a different mind-set to the traditional view of physiotherapy held by most participants on entry. For those able to accept and respond to the requirements of the care receiver/care giver relationship and its impact on physiotherapy roles, responsibilities and purpose, the challenging experiences facilitated maturity and personal development. For all the successful participants, this appreciation of the wider roles and responsibilities of the profession, far from disturbing their vision of physiotherapy appeared to enhance their desire to be a physiotherapist.

This naturally led to a growing appreciation of the expanding scope of physiotherapy practice. For all participants this was hugely motivating as they realised that the broad scope they had originally been attracted to, offered even more varied opportunities for career development than previously perceived. However, in experiencing authentic clinical practice they also experienced aspects of the care receiver/care giver relationship they found extremely negative. Exposure to passive patients surprised and frustrated several participants, as they perceived their effectiveness as practitioners was compromised by the patient's lack of engagement with treatment and an attitude that it is the physiotherapists' role to cure them. Participants were also annoyed by patients failing to attend appointments and the waste of time and inefficiencies this created within a service. This attitude was at odds with their conception of physiotherapy as active caring, but was an illustration of the complex nature of clinical care giving. However, it exemplified a growing commitment amongst participants to the physiotherapy service itself. This supports the concept of the developing importance of professional identity and its growing relationship to the participant's notions of self. Despite challenging patient encounters, the successful participants demonstrated a much greater 'warts and all' appreciation of the scope of physiotherapy practice and were even more committed to the profession.

#### **4.2.5: Ability to form interpersonal relationships**

Numerous studies have explored the issues around student retention and non-completion and have concluded there is rarely one reason causing student withdrawal from H.E. (Thomas, 2015; Thomas, 2012; Crosling, Heagney & Thomas, 2009; Christie, Munro, & Fisher, 2004). Two connected factors emerge as significant to a successful or unsuccessful learning journey, namely 'belonging' and 'engagement'. Belonging is the extent to which a student feels connected to and supported by the institution and course. This includes being accepted, respected and having interpersonal relationships that are stable and supportive (Thomas, 2012; Bowden, 2008; Christie, Munro, & Fisher, 2004). Engagement relates to the time and effort students devote to, developing relationships with others, and activities linked to fulfilment of their shared end-goal (Thomas, 2012).

Successful engagement can promote a sense of belonging in several ways. Social engagement is informal support through social interactions with friends and peers. Academic engagement is related to, but distinct from, knowledge

exchange. It is semi-formal support including pastoral care, but also incorporates discussions with, and/or formative feedback from academic or clinical staff. Such relationships potentially aid students make sense of complex issues, or offer advice on approaches to addressing academic/clinical tasks. Additionally, such informal interactions offer opportunities for active learning within a peer group. The notion of an authentic discipline specific curriculum needs to articulate to the student how the curriculum will enable them to fulfil their professional ambitions. Further, this should include the institutions approach to orientation and induction, teaching and assessment and support services. The role of personal tutors should be as conduits to support for student well-being and facilitate transition into and through H.E. (Thomas, 2012; Crosling, Heagney & Thomas, 2009).

What became clear during this study is that learning relationships (family, friends, peers, academics and clinicians) are crucial to a successful learning journey. They provide a support network, but also influence the development of the individuals learning identity. Deakin Crick, Broadfoot and Claxton (2004) identified those learners scoring highly on the learning relationships dimension of learning power were good at balancing the need for support and when to learn independently. In addition, such learners tended to take an active approach to learning with, and from others, as well as sharing challenges and solutions to overcome them. Mayhew, Wolniak and Pascarella (2008) found providing students with opportunities for positive interactions with diverse peers, such as interprofessional learning opportunities, aided the development of a life-long learning orientation.

Bíró, Veres-Balajti and Kósa (2016, p. 193) identified the main causes of stress amongst physiotherapy students as, 'high demand' and 'low support' particularly relating to suboptimal relationships with peers. The importance of belonging and the role of support networks appeared to be a key coping strategy for the participants of this study. Any disruption to the normal support resulted in expressions of stress and threatened results, or even continuation on the programme. All participants acknowledged how difficult the course was, but those participants who struggled to integrate into a peer-learning group found the programme stressful, isolated and with a reduced sense of belonging. The importance of active peer learning could explain the difficulties, some participants experienced in developing their personal characteristics into more professional

characteristics that would have facilitated their journey. For example, during this study those engaging with active group learning appeared to support the acquisition of knowledge and skills for the whole group. Key to this appeared to be the encouragement to making meaning through interactive discussions. In addition, learning strategies and behaviours, such as shared reflections, were discussed or at least observed by all. Thus suggesting that if this was perceived as successful for some it was likely to be taken on board by other members of that study group.

Bíró, Veres-Balajti and Kósa (2016) suggested the need for support from peers was much higher for females than males; and that it tended to decline as their studies progressed. This study largely supported that contention. The declining need for peer group support appeared to relate to personal growth for those who had used their peers in active learning earlier in their learning journey. Therefore, towards the latter stages of their education, they simply did not require the same level of support, as they had gained greater independence in learning and developed as more rounded individuals. However, a distinct difference was indicated by this study between a good social support network and an active peer study group. The former provided an outlet or escape from studies, but when the programme demands increased the social network could offer little practical support. Those involved with an active peer study group could not only motivate each other, but also offer advice on problem-solving, planning and structuring assignments or revision schedules.

The ability to utilise peer study groups most effectively may have a connection to identity styles utilised by individuals when constructing their identity (Figure 1.3). Berzonsky (2008) suggested older individuals tended to utilise an informational style that is much more explorative, self-reflective and open to alternative ideas. Those participants who demonstrated the ability to develop active learning relationships with staff and peers were much better equipped to get the best out of their experiences. These individuals tended to be mature participants and repeatedly made the most of both positive and negative experiences almost from the outset of the degree. According to Berzonsky (2008), younger participants are more likely to utilise a normative identity style, dominated by the requirement to conform to others expectations. All the younger participants were drawn towards similar age peer groups thus their academic role models were equally



inexperienced. However, most successful young participants did eventually develop peer support groups and appeared to benefit from active engagement with learning towards recognisably professional characteristics of striving to achieve excellence through a commitment to continuous improvement (Figure 1.2).

Throughout the study, the relationship with the clinical educators was hugely significant for all participants. Clinical educators were viewed as role models and vital for clinically contextual learning, as well as individuals to emulate with respect to professional characteristics. For some young participants a perceived negative relationship with their educator not only inhibited learning, but also led to individuals questioning their ambition to become a physiotherapist. For others, clinical practice placement was considered an opportunity to please their educators with their knowledge and demonstrate they were right for the profession through emulating members of the physiotherapy team. The immediacy and clarity of feedback from the educator was viewed as important in that relationship and their development as physiotherapists. The positive learning and motivation towards the profession gained from participants meeting the expectations of their clinical educator was paramount to feelings of a successful placement. Where the relationship was not quickly established and feedback was unclear, or perceived as negative, the result was confusion and demotivation. For two mature participants, forming a bond with educators, whilst desirable, was not deemed essential. Challenging placements and apparently poor or indifferent relationships did not appear to negatively impact on learning or adversely affect motivation for the profession. Indeed, such experiences appeared to emphasise professionalism, sometimes by illustrating how not to behave.

#### **4.2.6: Attitude to learning and learning power**

The concept of learning power has a strong relationship with most of the characteristics identified in this study. However, the concept of learning is fundamental to all HSC professions. The Health Professions Council (HPC) commissioned a study into professionalism in 2011. One way the concept was described was in terms of attitudes and behaviours such as an attitude to learn and question. This had resonance with one of Swick's (2000) key determinants of medical professionalism, namely to demonstrate a continuing commitment to excellence and a commitment to scholarship and advancement. In turn, a

commitment to ongoing learning and development is an internal professional value, an external expectation and a demand linked to continued professional registration. This concept is linked to the professional values that members will “*strive for excellence*”, but it is also prescribed by professional and regulatory bodies. It is to be achieved by seeking continuous improvement through evaluation of research, new developments, evidence and measures of effectiveness; critical reflection; enhancement of knowledge, understanding and skills; contribute to creating a learning environment and culture; and share their learning with others (HCPC, 2016, p. 6; HCPC, 2013, p.11; CSP, 2012, p. 13, CSP, 2011, p. 12).

The broad concept of continuing professional development raises questions whether such an attitude to life-long learning and development is a realistic expectation for all HSC professionals. Furthermore, can its presence, or absence, be assessed at entry to the profession? In order to make this judgement it is necessary to understand what it means to have a positive attitude to learning, or disposition to learn. Traditionally, previous academic achievement has been used as the indicator of future academic performance and by implication the individuals’ attitude to learning. However, this position is not universally accepted with several authors critical of the value of academic criteria alone in indicating an individual’s attitude to learning (Parry *et al.*, 2006; Gottlieb & Rogers, 2002; Guffey *et al.*, 2002; Mason & Sparkes, 2002; Morris and Farmer, 1998; Green & Waterfield, 1997). As discussed previously, findings from this study also challenge the absolute veracity of a positive relationship between prior academic attainment and future professional learning success.

Carr & Claxton (2002, p. 9) state, “*learning to learn is the ultimate life-skill for the 21<sup>st</sup> century*”. This is certainly a truism for HSCP’s where the rapid pace of research and technological development is coupled with radical, often politically motivated changes to work practices. This is further compounded by societal, cultural and moral diversity and expectation (DH, 2010). Clearly, there is a need for HSC professionals to be equipped to cope with ‘*super-complexity*’, which in the context of this thesis is defined as ‘the ability to deal quickly and confidently with numerous, rapid, varied and often contradictory expectations’ (McCune & Entwistle, 2011, p. 303; Deakin Crick, 2007, p. 136).

Fundamental to both learning to learn and coping with super-complexity is the interaction of four broad categories: learning capacities, learning identity, learning story and learning relationships (Deakin Crick, Broadfoot & Claxton, 2004; Carr & Claxton, 2002). Learning capacities include ability or skill, as well as the will to learn. Developing the ability to learn is likely to result in academic success, which may make the individual more likely to engage in those successful activities. On the other hand, a will, or disposition, to learn will tend to increase engagement because it is natural to do so, therefore, through habit, the development of ability follows consequently (Carr & Claxton, 2002, p. 10). As such, it appears to incorporate a motivational element and thus appears to be related to personality theory.

Learning identity is the beliefs, values and attitudes the individual learner holds about themselves, and about learning and knowledge, a concept clearly related to identity and values theories. Learning story is the chronological socio-cultural formation and development of the learner and again has a close relationship with identity, personality and values theories. Learning relationships relates to the nature and strength of learning relationships and the interaction of agents in facilitating or inhibiting learning (Deakin Crick, Broadfoot and Claxton, 2004; Shum & Deakin Crick, 2012; McCune & Entwistle, 2011). This is clearly linked with characteristics and the attitudes and behaviours expressed by individuals relating to their ability to form and maintain relationships.

Ruth Deakin Crick and colleagues (Deakin Crick, Broadfoot and Claxton, 2004; Deakin Crick, 2007; Deakin Crick & Yu, 2008) view dispositions within a broader concept of 'learning power'. This is expressed during the learning journey, in which an individual learns to cope with the demands related to a specific goal, or desired outcome. To succeed in challenging circumstances, the individual must not only 'know-what' is to be learned, but also 'know-how' to learn and 'know why' it is important to goal fulfilment. Integral to the individual's purpose for learning and the context in which it occurs they must also know "*who they are, from where they are coming, where they are going and why*" (Deakin Crick, 2007, p. 136). Therefore, individuals must be motivated and have both a sense of, and desire for, that direction. This implies a personal sense of identity, a sense of time and conscious goal selection in appreciating fulfilment of the desired outcome will take time and effort. Deakin Crick and colleagues (Deakin Crick, Broadfoot and

Claxton, 2004; Deakin Crick, 2007; Deakin Crick & Yu, 2008) proposed seven dimensions of learning power (see Appendix 15) that represent a continuum of conscious and unconscious aspects of identity, personality and values between seven paired opposites.

The association with identity, values and personality traits theories is apparent and supported by the work of other researchers. Poropat (2009) found that conscientiousness had a stronger association with academic performance than measures of intelligence. He therefore demonstrated the utility of the FFM generally and the importance of individual traits as predictors of future academic performance of students in university education. However, he argued the relationship needed to be viewed as a complex phenomenon where other traits and factors had a subtle and complex influence. This has resonance with the findings of this study, which identified conscientiousness as a multifaceted learning journey facilitator, but most effective in combination with other characteristics such as reflection and resilience.

Understanding the concept of learning dispositions offers those involved with HSC professional recruitment a window of understanding the factors influencing progression through a HSCEP, professional registration and meeting the expectations for continued registration. As suggested above, learning capacities can be thought of as comprising two closely related elements: capabilities and dispositions. Capabilities relates to competency such as study skills and strategies that make learning successful. This element possibly relates to prior academic performance and is an aspect potentially amenable to ongoing development and easy to assess based on grade point average.

Dispositions have been described imprecisely as a set of long lasting human attributes. They are reported as repeatedly in evidence, or relatively consistent; but malleable, or capable of development, suggesting an association with values theory (Entwistle & McCune, 2013, p. 268; Richardson, 2011, p. 288; Carr & Claxton, 2002, p.10). This association is implied by the related involvement of motivation. It represents the individual's tendency to respond to experiences in certain ways and thus is equally related to personality theory (Shum & Deakin Crick, 2012, p. 94; Deakin Crick & Yu, 2008; Carr & Claxton, 2002, p.10). With respect to learning dispositions, it represents the extent to which an individual is ready and willing to take the learning opportunities and resources available to

manage the challenges encountered. This characteristic is less amenable to measurement; however, the very malleability of the broader learning categories construct has huge potential for developing life-long learners. In this study, this aspect of learning disposition seemed most related to a combination of conscientiousness and resilience. This manifested in a general willingness to engage diligently with diverse learning opportunities regardless of difficulties encountered. It was also expressed by almost all the successful participants as the transformative nature of their learning experience.

The findings of this study share similarities with earlier research conducted by Parks and Guay (2012). Their research with university students in the USA identified achievement values related to goal content. In addition, the personality trait of conscientiousness was significantly related to goal striving, with both values and traits related to goal achievement. This view is shared with Dollinger, Leong and Ulicini (1996), who explored values and personality traits amongst university students and found the relationship between the two was not hierarchical, with neither superior to the other. The relationship could be viewed as dynamic and contextual if personality is accepted as relatively stable natural preferences, with values being more malleable. This then represents an internal negotiation process for establishing and maintaining personal identity in varying social contexts.

The concept of a disposition to learn is inextricably linked to learning approaches. These are sometimes called learning styles, in which deep and superficial approaches are influenced by the learning intention and the context in which the learning occurs (Vanthournout, *et al.*, 2013, p. 34; Entwistle & McCune, 2013, p. 269; McCune & Entwistle, 2011, p. 304; Richardson, 2011, p. 288; Entwistle & Peterson, 2004, p. 414). The similarity with Berzonsky's (2008) cognitive identity styles (see Figure 1.3) is clear. Deep learning, viewed as the intention to thoroughly understand (Entwistle & Entwistle, 2003), relates closely with the informational style, hallmarked by active exploration, processing and critical evaluation through reflection and feedback. This contrasts with a superficial approach, considered to be the intention to reproduce material to be learned (Entwistle & Entwistle, 2003) which relates to the normative style in which exploration, or challenge, is avoided. In this study, both styles were in evidence.

Two mature participants displayed a deeper approach to learning as well as a more informational, or reflective approach to their learning experiences. Several

younger participants demonstrated, at least in the early stages of the programme, a more superficial approach that was focused on learning to pass the module. This appeared related to their normative style, which was most in evidence when on placement and their attempt to follow their clinical educator's example. When this did not happen, the participants were disheartened and questioned if they were on the right career path. Whilst one of these participants retained that approach throughout the programme, particularly with respect to academic tasks, the others demonstrated development towards a more critical, self-aware deeper informational style.

Milanese, Gordon and Pellatt (2013b) cited several studies indicating a positive link between learning style, self-directed learning and academic performance. They also viewed learning styles as personality traits due to their relative stability. However, their dynamic quality, the potential to be influenced by a range of factors including the nature, purpose and context of the learning, implied at least a relationship with values theory. Interestingly, Morris and Farmer (1998) in concluding their study of physiotherapy students' academic and clinical performance suggested selection of physiotherapy students could at least consider learning styles and approaches to learning as part of the process.

Selection to HSCEP's based on learning styles must, however, be viewed with caution. Certainly, it is desirable to have physiotherapy students able to make cognitive links between propositional and non-propositional knowledge. These links should be both patient-centred and contextual rather than simply rote learning to pass an assessment. Yet, it is important to recognise some students naturally combine approaches; and others who would naturally utilise deeper approaches may be forced towards the superficial by a poorly designed curriculum or assessment (Entwistle & Entwistle, 2003). Milanese, Gordon and Pellatt (2013b) suggest, depending on the learning situation, each style has both advantages and disadvantages. Indeed, an understanding of students learning styles is likely to have more value for the teaching process and the combining of students into learning groups; or to encourage reflective thinking amongst students about their learning processes than it will in the selection of applicants to a PT programme. Again, the findings of this study support such a contention. A mature participant who repeatedly displayed a critical, reflective and deeper approach to learning in the first two years, found the demands of the programme in semester 2

of year 3 such that they adopted a superficial, just do what is required, approach to the final assessment.

Students enter a learning journey to engage in progressive development, an aim shared with the academic team. As Entwistle and Peterson (2004) suggest this ideally would be from dualism (knowledge is right or wrong), more likely expressed on entry to H.E. and progressing through various educational experiences towards multiplicity (numerous ways of viewing situations). The journey ideally culminates with maturation into relativism (views arise from the interplay of evidence whilst acknowledging the possibility of various conclusions), and commitment with relativism (settle on a personal conclusion whilst accepting all knowledge and resultant conclusions are relative) (Entwistle & Peterson, 2004). Indeed, one of the aims of HSCPE is to facilitate students' ability to make sense of the real-life professional world by connecting newly gained knowledge with existing and experiential learning. Learning should therefore be transformative and this was the case at the culmination of this study for the majority of participants.

The transformation relates to the awareness and acquisition of professional characteristics. A physiotherapy-learning journey begins with personal aspiration, based on previous learning stories that may not always prepare the individual for the new learning journey. This was reported in this study by one participant clearly identifying their previous education had not prepared them for the demands of the physiotherapy programme. The learning story is the socio-cultural formation and development of the individual learner, incorporating the culture of the institution, the local area it is situated and where the students are living for the duration of their studies. However, in the case of the physiotherapy student it also includes the culture of the profession and that of the various clinical locations and clinical educators they experience through their degree programme. In one sense, the journey is mapped by the personal learning dispositions and resultant behaviours of the individual; shaped initially by their learning identity, sense of self and worth (self-esteem). Their aspirations for that learning are realised by their learning capacities and the extent to which they can be considered a competent learning agent (Deakin Crick & Yu, 2008).

In another sense, the journey is mapped (facilitated or inhibited) by the nature, strength and quality of their learning relationships (academic staff, clinicians and peers). This also relates to the extent to which they are supported by other

learning agents, for example family and friends support networks; and also the learning environment/s and the available institutional support networks and services. The combination of relationships and agents can inspire and stimulate the individual to become an active, reflective learner; and motivate them to acquire the requisite knowledge and skills of physiotherapy. A successful combination of relationships and agents can encourage the learner to take ownership of and responsibility for their own learning. Through this transformative process, they may develop self-awareness of how to be a competent and successful learner to accomplish their goals (Fazey, 2010; Mayhew, Wolniak & Pascarella, 2008, Deakin Crick, Broadfoot & Claxton, 2004). The importance of interpersonal relationships to the learning journey were repeatedly identified throughout this study. All the successful participants demonstrated an awareness of their own transformation on the journey; this included a participant who appeared to retain a superficial/normative approach to learning. They too recognised personal growth and expressed an eagerness to develop their own on-going learning journey.

Milanese, Gordon and Pellatt (2013a) identified the most valued clinical learning activities for a cohort of final year physiotherapy students were those involving individual patient-centred activities. However, it was the discussion with and immediate feedback from clinical educators, on the student's limitations, background knowledge, skill performance and attitude throughout, that enhanced the experience. This point was supported by McCune (2009, p.360) when she identified the importance of staff 'scaffolding' students authentic learning experiences. These views were supported and expanded by this study in identifying interactions with clinical staff promoted the student's willingness to engage with their studies and enhanced their identities as learners. The role of staff generally and clinical staff especially, in promoting the characteristics and values of physiotherapy was generally viewed as a positive influence by participants. However, for some, if the relationship was perceived as negative it threatened their understanding of that area of practice and their aspirations towards physiotherapy.

As previously discussed, it is too simplistic to state a positive attitude to learning and desire to understand were sufficient to ensure a successful learning journey. For example, the participants who displayed these characteristics from early in the programme did successfully achieve with good degree classifications. However,



for one the journey was challenged at key points by some significant external factors. The implication being that individual personal characteristics, as with previous academic performance, are insufficient on their own as an indicator of the potential to achieve physiotherapy status. When challenges emerge the individual must be able to draw on reserves of resilience, termed by one participant as “*doggedness*”, conscientiousness and reflection. In addition, support networks from family, and specific professional support from academic and clinical staff and peers are important in reinforcing the sense of belonging to the physiotherapy community.

The transformative nature of the learning journey in which, at conclusion, the individual sees things in a different light was very prominent (Entwistle & Peterson, 2004, p. 411). In this study all successful participants reported change with respect to their self-view, or identity. For some, this was an acknowledgement of developing maturity and a greater awareness of the scope of practice, indicating both personal and professional growth. For most others, this was a more profound understanding of the professional role and its wider impact, not just on individuals, but also on the wider society. There was also evidence that physiotherapy had a deeper meaning for some. Several participants suggested that how the profession was viewed by others now mattered to them at a personal level, thus implying a harmonisation of their personal and professional identity.

#### **4.2.7: Summary**

In order to achieve the Governments aims of only recruiting health and social care professionals with “*the right skills and the right values*” it is important for those involved in recruitment to be able to identify what these are (DH, 2013, p. 1). Previous academic performance is of highly questionable value in predicting the development of clinical skills and future professional performance (Parry *et al.*, 2006; Guffey *et al.*, 2002). Undertaking this study identified all the participants experienced numerous challenges, varying in nature, throughout their learning journeys. In order to achieve their ambition of qualifying as a fit-for-purpose physiotherapist, each participant was required to draw from a range of personal characteristics to facilitate progression and manage challenges encountered along the way. These characteristics included conscientiousness, resilience, reflection, caring, the ability form interpersonal relationships and have a positive attitude to learning. The characteristics presence appeared to be related to concepts of

personality (stable traits), values (malleable traits) and learning power (malleable traits), with each appearing to have a specific bearing on the success, or otherwise, of the participants learning journeys.

The findings suggested that individually expressed characteristics although appearing to have a positive influence on progression were not sufficient to ensure goal fulfilment measured by graduation, professional registration and gaining a physiotherapy post. Each characteristic was conceptualised as comprising several facets related to personality traits, values and learning power theories each contributing to the finally expressed characteristic. The facilitatory role of the characteristics to the learning journey was not uniform, but influenced by context. Impairment, or the apparent absence, of one could be counteracted, or bolstered by utility of others. Thus, for example, individuals experiencing a loss of their normal support network, or threats to their resilience due to increases in workload were able to draw on reserves of conscientiousness to complete the required tasks successfully. This implied a successful learning journey is facilitated by several personal characteristics acting in concert, or as a dynamic relationship with one or more coming to the fore when others are overwhelmed. However, during the study, it was the apparent absence of characteristics, or key facets of a particular characteristic, singly or collectively, that illustrated their importance to the progression of the learning journey, as those participants struggled or failed to progress.

The identified characteristics were envisaged by this study to be key aspects of professionalism, or fitness-for-purpose required for full registration into physiotherapy. It was perceived through the learning journey that the personal characteristics developed, or were remodelled into recognisably professional characteristics (Figure 1.1). Figure 1.1 and 1.2 provide a summary of some of the key professional requirements and expectations. Recruitment onto a health and social care education programme must identify applicants with the potential to succeed academically but most importantly, professionally. Here the relationship between personal characteristics and professional identity and the importance of the learning journey became more apparent. Identity has been described as a process in which an individual makes comparisons between similarities and differences, and judgements that are cognitive and affective to understand who they are, which groups they should belong to and which professions or

organisation they aspire to (Jenkins, 2008; Berzonsky, 2008; Ellemers, Kortekaas & Ouwerkerk, 1999).

The successful participants demonstrated the development of their personal characteristics into recognisably professional characteristics. In addition, they illustrated the transformative power of education leading not only a recognition of the characteristics of the profession, but also to the acceptance that their personal identity was harmonised with the physiotherapy identity. The implication being professional exposure altered preference values based on a proto-physiotherapy identity into personal values, recognisable as professional characteristics.

The aspiration for the physiotherapy identity appears to have been the significant motivator during the participants learning journeys. Even when personal characteristics or resources were stretched, or temporarily overwhelmed, the end goal appeared to drive individuals on. This was not the case for one participant who had to withdraw from the programme at year 2. However, it is inconceivable that they simply did not have the personal characteristics to achieve on this degree, as they were one of the most qualified participants, with associated life and work experience. The implication from this one example is if learning journey experiences are negative the comparison of previous identities, including professional identities, with the authentic experience of physiotherapy education could be in conflict and ultimately becomes de-motivating. This in turn may lead to an on-going lack of belonging, resulting in the decreasing strength of attraction to and affiliation with the physiotherapy identity. When a previously established identity is threatened, rather than enhanced, by the expectations of a new professional identity dissatisfaction results. In this study the participant failed to demonstrate a concept Hodkinson, Biesta and James (2008, p. 40) term “learning as becoming”, when the process of learning is itself a process of identity formation. For the institution, there is not only a sense of failure but also a potential blot to their reputation highlighted by non-completion statistics.

A successful learning journey appeared, as previously discussed, dependent on the development of personal characteristics into professionally recognisable physiotherapy characteristics. This process determined the extent to which the individuals’ potential, identified at recruitment onto the physiotherapy degree, had been realised by their eligibility for HCPC registration on graduation. The chief driver for success emerged as the strength of the attraction to the end-goal, the

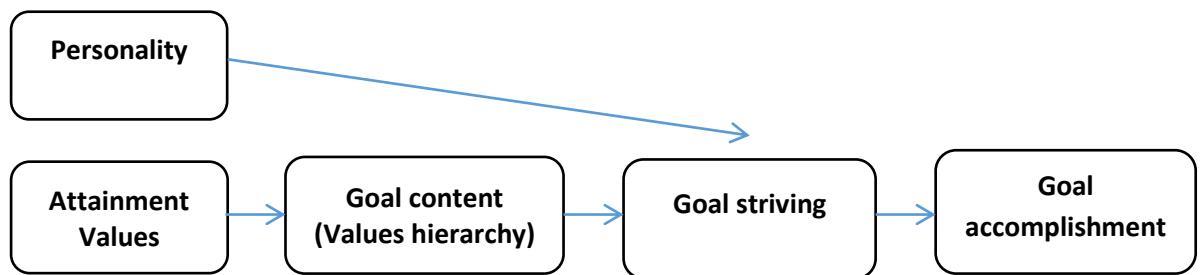
achievement of a physiotherapy identity. This finding supports existing literature that identified where an identity was strong and reinforced by authentic experiences, with clear and supportive formative feedback; with good access to support systems then, almost regardless of the challenges encountered, goal fulfilment will be achieved (Kiernan, Proud & Jackson, 2015; Kiernan, Repper & Arthur, 2015). In contrast, if the professional identity is weak, or skewed to a narrow view of practice, then it appears, even with the identified positive characteristics present, they are unlikely to be utilised in a concerted manner to facilitate the learning journey.

#### **4.3: Reimagining of the relationship between values, personality and learning power in the attainment of a professional identity.**

The intention of this thesis was not to prove or disprove the many and varied assumptions and postulations regarding identity, personality, values or learning power theories. Rather it intended to acknowledge, whilst disagreements exist, there are close relationships between the various concepts that impinge on the findings and interpretations of the study. This acknowledgement may aid in understanding the nature of personal characteristics and identifying those with particular relevance to the physiotherapy education journey and beyond. For example, Dollinger (1995) provided evidence that differences in identity development are related to personality traits identified by the five-factor model. The exact nature of the relationship was unclear and raised questions whether, an individual's processing style, utilised to determine identity, influenced, or was influenced by, personality traits?

Further Dollinger, Leong and Ulicni (1996) suggested important associations exist between values and traits. This point was picked up by Parks and Guay (2009) who presented a model of the relationship between the two (see Figure 4.1) and their combined effect on motivation to achieve goals. This model identified values as a key influence on individual goal choices (goal content) in which they are more likely to select goals, cognitively and affectively, that are congruent with their values and the level of importance the individual places on that value (values hierarchy). Personality preferences, particularly conscientiousness and emotional stability, dictate the effort and persistence (goal striving) devoted to achieving the goal (goal accomplishment).

**Figure 4.1: Model of the relationship between ‘values’ and ‘personality’ on personal goal fulfilment (Parks & Guay, 2009).**

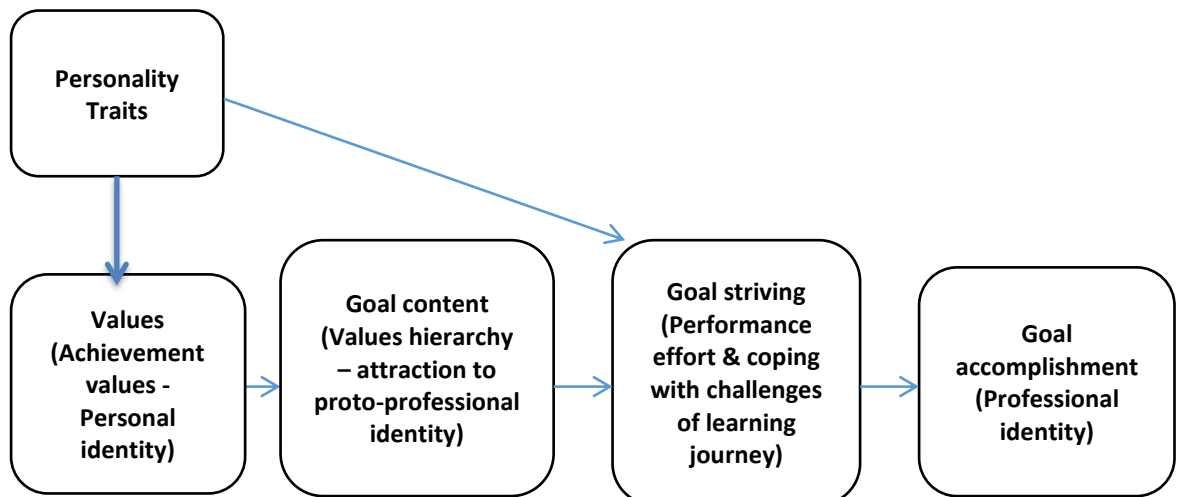


This model suggested an interconnectedness of concepts, and in the context of this study, offered a potential framework to examine and explain the interactions between individual and professional identity, personality traits and values and the characteristics expressed by physiotherapy students. It also aided understanding of how these interactions impact on behaviour and progression through a professional education programme.

This understanding initially led Parks and Guay (2012) to add to their original model suggesting attainment values indirectly influenced performance especially in situations when the individual could establish their own goals. In figure 4.2, I propose an adaptation to this model in which attainment values are much more closely related to the personal identity of “*who am I*”. However, personal identity is also influenced by personality providing a foundation for future identifications of similarities and differences and thus I posit that personality may influence the initial attainment values. The goal content/values hierarchy is where similarities and differences are explored, representing the comparison of a proto-professional identity with authentic learning experiences. Goal striving is both the effort and commitment to pursuing the goal and managing the challenges of the learning journey through utilisation of available personal characteristics. The strength of attachment to the developing professional identity is a motivational factor, which is influenced by the fit between values and goal and the ability to utilise personal characteristics to facilitate goal accomplishment. The conclusion is recruiting individuals with best fit implies the alignment of personal values with professional goals. Best fit in this instance means individuals who have the strongest attraction to, and understanding of, physiotherapy, implying a values fit, and have the

personality traits that facilitate progression and accomplishment, thus implying a behaviour fit to the demands of that professional.

**Figure 4.2: Adaptation of Parks & Guay (2009) model of the relationship between ‘values’ and ‘personality’ incorporating identity theory in personal goal fulfilment.**



This adaptation illustrates how notions of identity, values and personality may combine towards accomplishment of professional status goal. However, the inclusion of learning power theory aids appreciation of the evolution of a professional through their learning journey. Figure 4.3 presents a reimagining of the Park and Guay (2009/2012) model incorporating the concept learning power through the learning journey from the perspective of a physiotherapy student. This begins with a dynamic interaction between the individual’s personality traits and values enabling the development of a personal (learning) identity. This awareness, both conscious and sub-conscious is, in turn bolstered by the individual’s learning capacity, which is based on their learning experiences to date. The two elements of learning capacity, capabilities and dispositions are, as discussed in section 4.2.6, closely associated, but the relationship is unclear thus rendering assessment of such characteristics more challenging. Learning capacity, in part, shapes both the individuals emerging learning identity and the ongoing learning story.

The learning story for any individual is highly complex, situated in and influenced by their historical, social, cultural and personal resources. Learning itself is equally complex, and may be considered a process of developing understandings

for oneself. This emerges during educational experiences encompassing the individual's natural preferences (identity, personality and values) and the educational context. Additionally, it relates to goal content where evaluations between self and ambition are made. This makes demands on the individuals learning capacity and especially learning approaches and power. However, it is interdependent on the time and effort applied to the adopted strategies to succeed through goal striving (McCune & Entwistle, 2011). It is also significantly facilitated by the learning relationships developed through the journey.

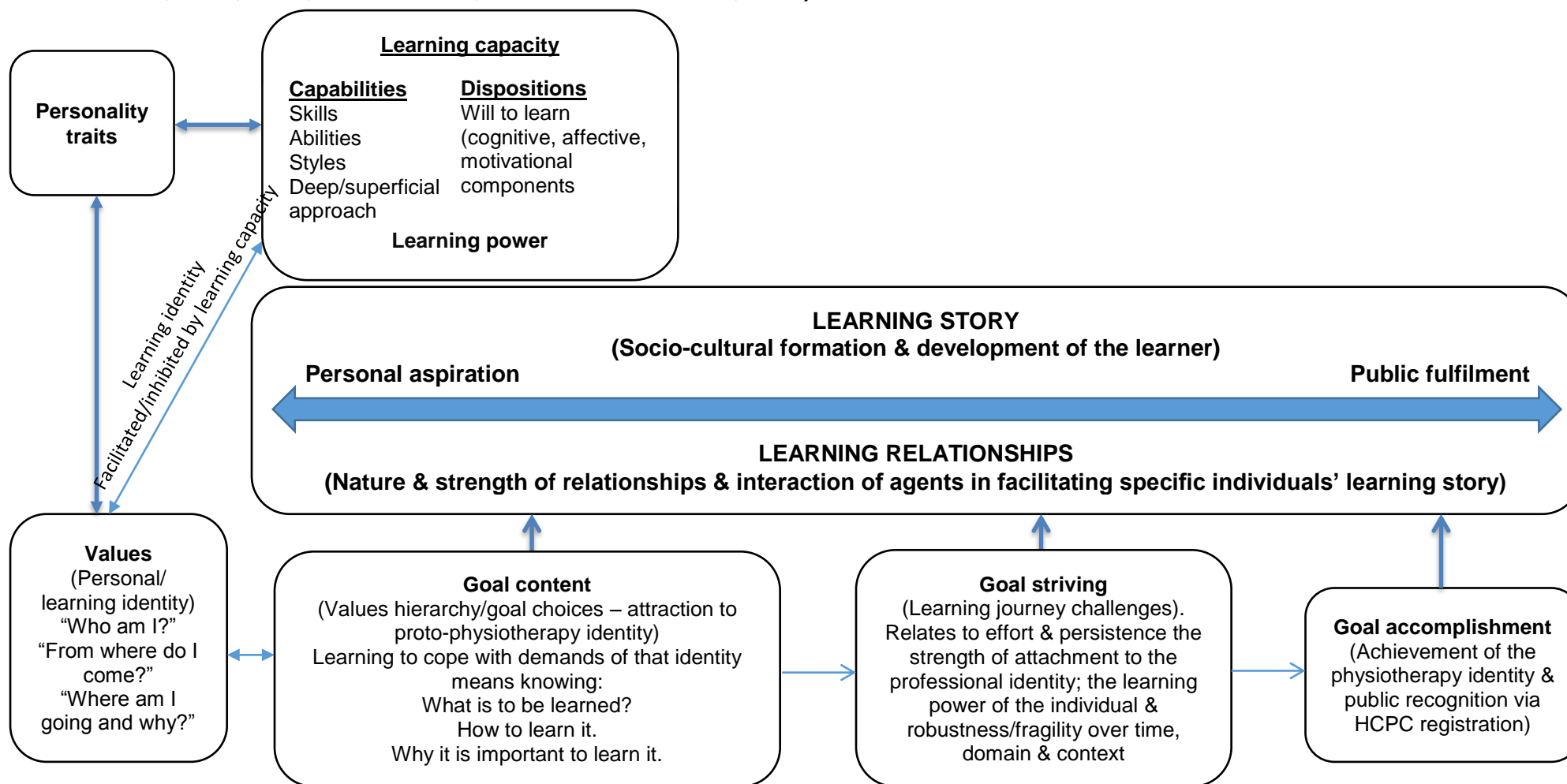
It is through goal striving that particular characteristics emerged during this study viewed as important to successful learning. These included reflection, which is related to self-awareness, making sense of learning experiences and learning from mistakes. Conscientiousness was also significant and manifested as internal motivation to learn in the best ways possible, whilst striving for excellence. Finally, resilience related to giving-it-a-go, accepting challenges as opportunities and bouncing back from disappointments and difficulties. The presence or absence of these characteristics appeared to determine the relative robustness, or fragility, of the individual's personal resources or equally signified their personal learning power.

The culmination of the learning journey is when personal aspiration becomes public fulfilment. This is the recognition of having achieved the physiotherapy degree and professional status through registration with the HCPC. Both factors are understood on varying levels by the individual and wider society as goal accomplishment. The fulfilment of the goals fulfils a number of key requirements for the learning journey. It legitimises the overall costs (personal, social, professional) encountered through the experience. There is personal and institutional verification of academic attainment by the award of the degree classification. In this study, this added to the successful participants learning identity by denoting them as academically and practically competent. Therefore, they were potentially equipped for a life-long learning career as an evidence-based physiotherapist. The award of the degree legitimises the HEI's role in preparing successful students for a potential future HSC career with value to the wider society. The eligibility for HCPC registration confirms the valuable role of the HEI and effectively awards the graduate the physiotherapy identity for which they have been striving. Simultaneously, it informs the wider society something of the

individual's newly acquired identity. The nature, knowledge base and skills of those professionally registered individuals. Further, it implicitly confirms to the individual registrant they have completed the first part of their learning journey. However, their learning story continues as autonomous practitioners, they are also autonomous learners with CPD a professional re-registration requirement. At the culmination of this study, the remaining, successful, participants clearly identified that they understood and embraced the identity and expectation for an on-going learning journey.



**Figure 4.3: A reimagined model of the relationship between ‘values’, ‘personality’ and learning power on the learning journey to professional (Physiotherapy) status (adapted from Parks & Guay, 2009 & 2012; Shum & Deakin Crick, 2012, p. 94; Richardson, 2011; Deakin Crick, & Yu, 2008; Deakin Crick, Broadfoot & Claxton, 2004).**



#### 4.4: Conceptualising the development of personal characteristics

These concepts, despite the complexity of their interrelationships, are valuable in understanding the role of personal characteristics in accomplishing essentially social goals. However, it is also important to recognise the centrality of the human organism itself (Stiller & Banyard, 2015, p. 6). Humans are social creatures who engage in social processes in which individuals and groups interact, form relationships and develop understandings about how such interactions impact on decision-making and behaviour (Miller, Hylton & Arnold, 2015, p.279). However, as biological organisms each individual has a unique genotype, pairs of genes inherited from parents, that controls the production of proteins (the building blocks of the organism) representing the total potential of individual physical and molecular characteristics. However, not all available genes are expressed. The combinations that are, referred to as the phenotype are determined by both the available genetic make-up and the environment. The environment includes the home environment, socio-economic status, opportunity for social and/or physically active lifestyles and interactions, in which that individual was conceived, developed, born and reared (McConnell & Hull, 2011; Marieb & Hoehn, 2013; Stiller & Banyard, 2015; Bear, Connors & Paradiso, 2016).

Genes then are the driving force behind physical and psychological development and the heritability of anatomical, physiological and behavioural characteristics. This ensures not only the continuation of human characteristics, but also flexibility in the genepool as each individual shares their parent's genes, but expresses them uniquely. Domingue *et al.* (2015, p. 10) also suggest genotype is associated with observable behaviour traits. However, as suggested, gene expression is mediated by the environment in which the individual exists. For example, poverty associated with poor nutrition and decreased life-chances, plays a significant role in brain tissue formation and structure (Domingue *et al.*, 2015). The relationship between physical and psychological development and the expression of individual personality and behaviours is complex. However, research from animal and human studies makes it increasingly clear that genetic factors are significant contributors to the observable personality variants found in and across populations. For example, Asian populations that generally have low extraversion scores compared to similar European populations express a specific Brain-derived neurotrophic factor (BDNF) polymorphic variant allele at approximately 40% of the

population compared to 20% amongst the corresponding European population (Terracciano, *et al.*, 2010). This genetic factor influences synaptic transmission of several neurotransmitters, with one or more of its variant polymorphs implicated in deficits in the neural reward system and strongly linked with the personality trait introversion (Terracciano, *et al.*, 2010; Krishnan, *et al.*, 2007). Although the hard scientific evidence is beginning to identify and understand the genetic components related to personal characteristics, it also acknowledges cultural and environmental factors as important determinants of personality and behaviour (Terracciano, *et al.*, 2010; Krishnan, *et al.*, 2007).

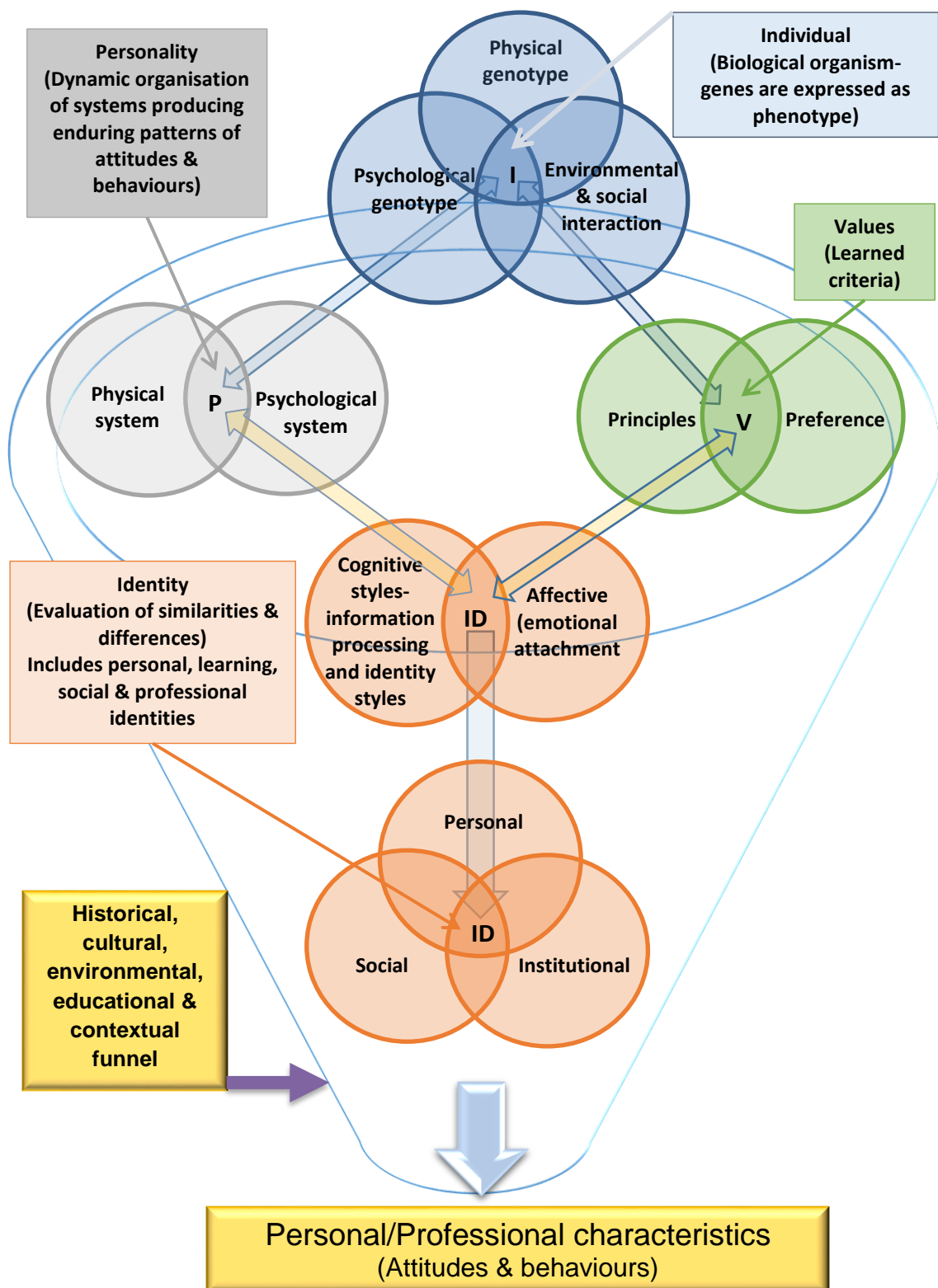
Central to the notion of human personal characteristics is to understand the importance of the social environment and the interactions between individuals, families, communities, cultures, religions and institutions in their development. It is through these social processes that the individuals' unique phenotype (physical, psychological and behavioural) interacts within highly complex environments and contexts. It is the interface between the two, genetic and social, where identity, personality, values and ultimately behaviours are expressed (Bear, Connors & Paradiso, 2016; Domingue *et al.*, 2015; Stiller & Banyard, 2015; Marieb & Hoehn, 2013; McConnell & Hull, 2011). This is equally true for professional identity development, as observed during this study, in which several participants talk of growing through the learning journey. Although their meaning is related to personal and professional development, this can be considered to incorporate the physical, intellectual, social and professional requirements of fulfilling the physiotherapist's role.

How the patterns, traits and organisation observable in the human social world come into being from apparently order-less constituent parts (Shumway-cook & Woollacott, 2012) is summarised in figure 4.4. This model revisits figure 1.5, which conceptualised the influence of a developing professional identity on the expression of individual personal characteristics. This new model posits a dynamic interaction of systems that seeks to explain the multifactorial development and expression of individual personal characteristics. The outcome of which is that others recognise the individual, their membership of a specific group or profession and have expectations of behaviour resulting from that identification.

The model views the individual as a product of their genotype (genetic make-up) and resultant phenotype (genetic expression) based largely on environmental and social interaction contexts in which they develop from conception to and through adulthood. Thus, we view the individual within a funnel of historical, cultural, social and environmental contexts. The phenotype provides the physical and psychological framework which through various social processes (for example; family up-bringing, socio-economic status, schooling, religious affiliations) the individual develops a personality and is exposed to formative values. These provide the individual with both principles for life (life views) and personal preferences. The physical and psychological ability to think (information processing and identity styles), together with a growing exposure to and attainment of values enables the individual to develop a self-concept, or personal identity. Alongside this, a social (group) identity forms, which may be multiple, and may change over time when comparisons of newly encountered social similarities and differences interact with individual values.

Usually in late adolescence or early adulthood, an institutional (organisational/professional) identity emerges as the individual explores job/career options. The identity evaluation process, particularly in relation to decisions about higher education and a professional identity, is the conscious exploration and evaluation of options that best fit with the individual's notion of self and their life views. However, it should be noted that much of the attraction might be in large part unconscious. Through marketing and prospectus information, university open days, summer schools, and taster sessions the individual refines their understanding of who they are and where they want to be. The identification process is likely to be dependent on the interplay between phenotypical manifestations, the cognitive (informational, normative, or diffuse-avoidant) styles adopted by the individual, their processing (rational or experiential) style; and the affective (emotional) impact of various social contexts, or professional roles.

**Figure 4.4: Dynamic interactive systems (DIS) model of the development and emergence of personal characteristics.**



Thus, the development of identity is inextricably linked with the development of personal characteristics (personality, values and associated behaviours). The phenotypical physical individual (structural and psychological) interacts with the social environment resulting in the development of personal characteristics. The importance of the genetic component of this construct partially explains why personality traits are considered such a stable set of characteristics. Personal characteristics are, in crude terms, literally dependent on how the individual is wired. The relationship of identity with values, considered a set of relatively enduring beliefs about what is desirable in life, are learned in response to social interactions. They are thus, to some extent, malleable by further social processes such as education.

Personal characteristics are the product of the dynamic (not constant) interaction of all these systems. With maturity (development), the individual learns to express their values and behaviours in socially context specific ways that meet their needs for existence. This model implies identity and associated characteristics are limited by the individual's phenotype. It could be argued one has the genes to be a physiotherapist or not. Equally, accepting the developmental role of social experience, including the transformative nature of education, one has had the social opportunities to facilitate development as a physiotherapist, or not. It is likely that an individual's reality is dependent on both aspects.

#### **4.5: Strengths and limitations**

##### **4.5.1: Insider research**

The situated-ness of the insider-researcher naturally questions their ability to produce good quality unbiased research (Menter *et al.*, 2011; Reed & Procter, 1995). However, as Creswell (2007, p.37) points out, all social science research begins with certain assumptions based on the researchers world-view. They go on to explore the meaning/s individuals, or groups, ascribe to their social/human situation, and therefore, all social or human research is value laden. Key to addressing this apparent dilemma is to understand the purpose of the research itself. For the insider-researcher, the primary goal is to explore an aspect of their own practice with a view to development. Therefore, it may be considered applied rather than pure research. The very situated-ness of the researcher furnishes them with a much greater understanding of their area of research interest than

could be expected of an external academic researcher; and thus drives their personal commitment to understanding that role (Menter *et al.*, 2011; Reed & Procter, 1995).

The concept of the neutral and objective researcher becomes a moot point when the purpose of the research is to bring about change within the researchers own sphere of practice. In this study the focus being the researchers professional background (physiotherapy), their institutional role of admissions tutor (the university), and the political environment surrounding health and social care recruitment (VBR). Education, including the local admissions strategy and processes, is all about improvement. Therefore, research into education, including recruitment should also be about improvement and not simply adding understanding to the wider body of knowledge; in applied research, this latter outcome is a valuable bonus.

Hewitt-Taylor (2011) suggested practice decisions draw on research far less than most researchers might expect. This is precisely the situation HSC recruitment faces. In the years following the publication of the Francis report (2013), there has been a great deal of material produced regarding the importance of VBR. However, there is general agreement that the evidence to support VBR is complex and confusing; with no reliable evidence identifying the key values to seek during recruitment (DH, 2014; Work Psychology Group, 2014). Clearly, such decision-making cannot rely on the guidance of theoretical knowledge alone. Therefore, a blended approach of theoretical knowledge with personal experience provides contextual expertise. This applied expertise, gained through experience and sharing good practice with colleagues, is a powerful justification for the insider approach adopted by this study.

#### **4.5.2: Research bias and validity**

If objectivity is impossible, particularly because of the embedded position of the researcher, interpretations can only be accepted if there is clear consideration and address of bias. The fact the study is socially constructed by the researcher, who then reports the outcomes must be viewed as co-constructions based on the researchers own position with respect to the participants and data collected. The reflexivity of the researcher is therefore vital to make explicit his or her own position and guiding values within and through the whole research process (Reed

& Procter, 1995, p.47; Creswell, 2007, p.179 & p.243; Bryman, 2008, p.698). This has been at the forefront of the approach to this study. To signpost the direct involvement of the researcher within the process, but also to document the researchers own learning journey (Appendices 16, 17 & 18). The attention to reflexivity is also demonstrated in the detailed consideration of ethical processes adopted in the methods. By explicitly locating the researcher's position within the study, reviewers can more easily make judgements on the veracity of interpretations made (Menter *et al.*, 2011).

Another important consideration when judging the quality of such research is in the methodological approach adopted by the study. The utility of the Framework approach is its transparency. This allows the reviewer to not only see the researcher in the process and thus counteract unintentional bias; but it also reduces the risk of *a priori* knowledge biasing the findings. For every assumption or interpretation, textual evidence was presented. That is not to say *a priori* knowledge was absent; rather it is an accepted aspect of the systematic approach; but its influence is minimised during the analysis stage. The prior knowledge and expertise of the insider-researcher together with the transparent and systematic handling of the data was invaluable throughout the study.

#### **4.5.3: Consent and coercion**

Another negative perception of the insider-researcher is the potential for coercion of the participants. This is based on a perceived power relationship between in this case the academic (researcher) and students (participants). There is a possibility some students could be led to consent through an implicit sense of duty, or a sense of fostering the goodwill of the lecturer, or avoiding the lecturer's displeasure at some point during their programme. Therefore, consent in these circumstances maybe viewed as a means of the student gaining some advantage in their learning journey. To reduce the potential for such an accusation the researcher drew on the positive egalitarian relationships fostered on the programme between academic staff and students. This was facilitated by adopting 'Personal Tutor' informality when explaining the study and requirements. Throughout the study, there were numerous examples of the positive relations between staff and students and therefore, the participants' willingness was considered a positive aspect of that relationship.



The study adopted a process approach to obtaining consent. This began with an audio/visual presentation and the provision of written information about the nature of the research, the purpose and the commitment required from the participants (appendix 2). It was presented without threat or inducement, and an explicit agreement that volunteers could change their minds and withdraw from the study at any time without fear of repercussions. A 24-hour cooling-off period was also incorporated. Once the interview participants had been identified, each was contacted again to confirm consent. They were re-contacted at the beginning of each phase, with verbal consent confirmed both at the time of each invitation and immediately before commencement of the interview. Thus, they were afforded numerous opportunities to step away from any perceived research burden.

#### **4.5.4: Semi-structured interview data collection**

The major criticism that could be levelled at the data collection process was the time span from when the interview occurred to the chronological period being explored. Phase one interviews, for example, occurred towards the end of semester 1 of year 2, but covered the period from first aspiring to become a physiotherapist, through the investigation and recruitment process, to starting and completing year 1. This meant that participants were recalling events that may have been several years in the past. This was particularly true for those who had to undertake specific study, or resit exams in order to achieve the academic entry requirements of the programme. Therefore, the issue of memory was a potential weakness. However, it is important to understand the nature of the data being collected in order to judge if this was truly problematic.

Paley and Eva (2005, p. 84) suggest criticality is required when utilising participant recollections in research. The view that such raw data represents the private contexts of the participants' learning journey must be considered with caution (Riley & Hawe, 2005, p.226). Such data is a reported sequence of events with the asserted causal factors relating to the events. However, there may well be interwoven plots designed to produce a specific emotional response from the listener (Paley & Eva, 2005, p. 89). Indeed, it has been stated this rich data has a certain "un-deniability" (Miles & Huberman, 1994, p. 1). It presents often vivid and meaningful personal representations and understandings that can be much more convincing than manipulated numbers (Miles & Huberman, 1994). Nevertheless, it is important to keep in mind they are a descriptive recollection of the participants'

journey. As such, they cannot be taken at face value, as in themselves they are unable to provide wider explanations or furnish broader understandings (Mentor *et al.*, 2011, p.215; Pope, Ziebland & Mays, 2000, p. 114).

Such personal recollection does have an immediate value to those researching humans in their varying life contexts. This is because they are one of the most fundamental tools utilised by individuals “*to communicate and create understanding with others and themselves*” (Feldman *et al.*, 2004, p. 147). Paley & Eva (2005, p. 94) offer some valuable insights about their value in qualitative research. Most important being they are not a straightforward record of experience. The researcher must acknowledge the coexistence of the objective account (lived experience) with the subjective explanation (the intended reaction). Thus understanding it is an account of how the participant wants a recollection to seem to you, rather than a review of ‘how it actually was’ (Paley & Eva, 2005, p. 94). Therefore, causal claims maybe true or false, but in the context of this study the explicit content of the recollections were only of limited interest. Rather, it was the description of feelings or actions in response to various experiences that indicated the presence or absence of recognisable characteristics. The emotional message participants wished to present was only of interest with respect to personal characteristics. Therefore, the issue of timing and reliance on the participants’ memory was not a detrimental factor to this study. It is acknowledged that the cohort approached was the only one that allowed exploration of their journey from aspiration through to graduation within the timeframe of the doctorate.

#### **4.6: Implications for professional practice, dissemination and future research**

Individuals seeking to become physiotherapists do so because they perceive it is right for them and they are suited to it. For mature students Kasworm (2008, p. 28) suggests they enter education to reinvent themselves, or to provide a more stable future for themselves and their families. However, the inter-relationship between their personal identity and personal characteristics and the professional identity they aspire to and characteristics required to achieve their goal may or may not be compatible.

The role of the admissions tutor is to ensure a strategy and processes are in place

to fulfil a professional gatekeeping role and ensure those admitted onto the physiotherapy programme are suited to it. This is not only from an academic ability perspective. Selection must also identify those with personal characteristics suggestive of a potential to succeed practically and professionally, as well as academically.

Undertaking this study has already led to changes to the admissions strategy and the processes used to recruit onto the physiotherapy programme. Key to this change has been a re-emphasis on the importance of applicants demonstrating thorough investigation into the profession. This has now been adopted as a key requirement for being considered for interview. Before the study, investigation into the profession was an identified requirement. However, this was focused on the applicant's ability to demonstrate general awareness of what physiotherapists do. It was accepted that not all their exposure to aspects of healthcare had to be specific to the profession. Now the expectation is that applicants will only be invited for interview if they can explicitly discuss a variety of observed roles. Additionally, they must be able to provide specific examples of roles and responsibilities of physiotherapists in varying/diverse areas of practice. During the interview, discussion of what they know about physiotherapy and how it compares to other healthcare professions is an exploration of the strength of their current attraction to physiotherapy. This change establishes the extent of the applicant's proto-physiotherapy identity in both breadth and depth with those scoring low in these domains unlikely to be made an offer.

The structure of interview day has also undergone change based on this study. In the past candidates were requested to email, in advance, a short essay on a topic of our choice. This was often related to their decision to apply for a physiotherapy degree. Now they are required to undertake the written task whilst attending their interview. Again, this is a topic of our choosing, which changes each year, but is related to key healthcare professional concepts such as caring, professionalism or learning in a physiotherapy context. The aim is several-fold, to ascertain how they cope with different stresses and demonstrate to what extent they can think on their feet. The written task provides an opportunity for them to demonstrate the discipline of planning and writing on a previously unseen topic and their ability to organise their thoughts and present them logically and coherently in-restricted time. Finally, it offers some insight into their personal characteristics and values

from what they write.

The interview process now benefits from the involvement of year 3 physiotherapy students. They act as guides on a tour of the facilities and informal 'buddies' for interview day. They are a resource for candidates' questions about the City, University and course; and they sit in on the interview as a non-threatening 'friendly-face'. The students also feedback to the interviewers (a clinician and an academic) about how the individual candidate interacted with their small tour group and the type of questions they asked. This gives an informal insight into the candidates interpersonal and communication skills. Especially valuable where candidates have been well drilled for the formal interview.

The formal interview itself is standardised, with each interview team ascertaining the extent the individuals they interview meet the programme criteria. This includes awareness of the breadth and depth of the profession, and the ability to discuss the roles and responsibilities of different healthcare professions. This latter point is based on the simple premise, how can someone know they want to be a physiotherapist if they do not know what other healthcare professionals do? Their approach to learning is explored, as is their understanding of what it means to be a professional physiotherapist. Their understanding and experience of caring is also explored particularly in the context of physiotherapy. Each interview team has a checklist of attributes, factors or issues to listen for in order to make their judgement about the candidate's attraction to physiotherapy and the personal characteristics they display during the interview. The candidate's performance in terms of personal presentation (appearance and non-verbal communication); verbal communication skills; reflective ability when discussing the profession; and self-awareness when considering their own transferable skills in relation the physiotherapy programme is also explored. Additionally, how they cope with a stressful situation, the interview day itself, where the ability to think on their feet is also judged, concludes the areas of investigation of the interview process.

During my time as Admissions Tutor, strategies and processes have evolved, and continue to do so. It is whilst undertaking this study, that the greatest changes have been instigated. Informed by the study findings a new admissions strategy has now been written in preparation for revalidation of the programme. This includes explicit identification of how we recruit with respect to VBR and how selection is informed by input from key stakeholders, service users and clinical

colleagues/physiotherapy service managers. Although it is acknowledged to encapsulate the wider views and expectations of service-users in the recruitment process, further work is required. However, understanding the role of personal characteristics, gained from this study, will form a strong foundation for that post-doctoral work.

Another evolving factor requiring investigation is the implication of fee-paying students. For the first time, September 2017, will see the first fee-paying cohort of physiotherapy students as the NHS retracts its preregistration education contract funding. The recruitment strategy has not changed specifically for this, as it remains uncertain how this circumstance will affect applicant and student expectations, or how it may influence the make-up of future cohorts. It is possible that we will see fewer mature students, for example. Recruitment processes and strategies that underpin them are, as always, dynamic, but as well as politically driven change, response to change must be based on research to fulfil ongoing professional requirements for evidence-based practice. In addition, in a culture of professional sharing and developmental support some of the future evaluations maybe undertaken by MSc physiotherapy students with BSc cohorts, in fulfilment of their dissertation/project module.

Therefore, impact of the understandings gained through this research process will inform ongoing physiotherapy recruitment and education at this University. The findings will be of potential value to admissions tutor colleagues representing other health and social care professions at this University that can be disseminated at one of the monthly Faculty Admissions Group meetings. They may also be of interest to the wider physiotherapy profession as recent publications on the topic of identity in professional specific journals testifies (see the outline dissemination plan in Appendix 19). The findings offer clarity to what is meant by values and behaviours in the VBR debate, particularly in relation to physiotherapy. Therefore, this should be available for consideration of what is really meant by values based recruitment and further the debate on how best to identify the desirable characteristics.

Prospective and current students should also be interested in this work in aiding their preparation for application or in readiness for registration. This awareness is already partially addressed in Open Day and marketing presentations, which should focus those with a proto-physiotherapy attachment on how best to develop

their understanding and prepare for the professional learning journey. Finally, there is considerable research potential in exploring and evaluating optimum ways to test for the presence of the identified characteristics that are valid, reliable and cost effective.

#### **4.7: Conclusion**

This study sought to explore students' recollections of their learning journeys to ascertain if personal characteristics could be identified that influenced their progression through a physiotherapy degree programme. Six personal characteristics were identified and conceptualised as multifaceted constructs related to personality, values and learning power theories. They were conscientiousness, resilience, reflection, caring, the ability to form interpersonal relationships and a positive attitude to learning. This provided insight into desirable characteristics for recruitment purposes to a physiotherapy degree, with the aim being to inform admissions strategies and processes development in fulfilment of my role as admissions tutor. In turn, the findings have utility for other admissions tutors both in my home institution and beyond; and contribute to the evidence-base on the complex contemporary and practical problems associated with VBR.

As with other research in this area, identification of characteristics alone could not support their individual utility throughout a learning journey. For example, not all successful students displayed all six characteristics all of the time. For one unsuccessful participant they did not demonstrate a total absence of all the characteristics, all of the time. Further, the identified characteristics at recruitment onto a degree programme could be considered a foundation for the development of professional characteristics, but at the stage of entry, only represent potential. The learning journey itself is the conduit, where proto-professional characteristics and identity are developed through authentic experiences towards recognisably professional characteristics and the physiotherapy identity.

What emerged was the requirement for several characteristics to interact to provide the individual with the necessary resources to manage diverse context specific challenges. The collective presence of these characteristics suggested, when one proved inadequate, or was overwhelmed by circumstances, others could be utilised to manage the situation. For example, conscientiousness, in

simple terms the characteristic to work hard is clearly valuable, but in the presence of challenge, it requires support through resilience, the ability to keep going in the face of difficulties. All of the participants experienced challenges at some point along their journey. Some of these were of a significant magnitude, such as bereavement of a close relative or friend; but it is reasonable to conclude difficulties are generally to be expected. Reflection appeared vital in enabling the individual make sense of diverse experiences and challenges, review what happened, their response to it, but most importantly to learn from those experiences. However, if the reasons why something did not go well, or a low mark was given, or negative formative feedback was received are repeatedly missed by the student, then growth and development as a learner and health care professional are jeopardised.

Learning relationships are vital to individuals on several levels. They provide a support resource when things become challenging; and they facilitate learning with and from others. In terms of professional and clinical development, they provide opportunities for individuals to compare their understanding of a profession with the reality gained through authentic experience. Therefore, their attraction to a profession can be confirmed and enhanced, or destroyed by a negative clinical experience or poor relationship with an educator. The ability to form complex interpersonal relationships can foster a sense of belonging, promote engagement, and confirm the individual's concept of physiotherapy and its alignment with their personal identity.

Caring is implicit in the term healthcare professional and tacit, that all individuals entering a healthcare profession are naturally caring. However, clinical practice exposes student physiotherapists to complex dilemmas and challenges of balancing a range of conflicting needs and requirements. Practical professional caring is one of the factors attracting most individuals to the profession initially. However, it is often through positive patient feedback that a boost to self-esteem follows, providing role-satisfaction and confirming their attraction to physiotherapy. Without a practical caring characteristic, it is unlikely any individual would embark on such a career path. However, exposure to the realities of practical care, through authentic learning experiences, can support or counter the desire for the physiotherapy identity.

The findings of this study have led to the postulation that personal characteristics

are the result of a complex dynamic interaction of biological (physical and psychological), psychological (cognitive and affective) and social (environmental, cultural, historical) systems. This leads to the establishment of an individual personality, with values that are both life-views and preferences and ultimately represent that individual's personal identity (Figure 4.4). However, the individual exists in a complex world of social, cultural and environmental influences, challenges and change. Through a process of cognitive and affective comparisons of similarities and differences, the personal identity is expanded. The result is the formation of a social identity, a learning identity and, potentially, a professional identity.

The likelihood of goal accomplishment, of attaining the desired physiotherapy identity, is governed, in large part, by the personal characteristics of the individual. It appears, the extent to which those characteristics provide resources to manage the challenges encountered, and match physiotherapy characteristics, denotes the extent that journey is likely to be smooth and successful. However, the strength of the attachment to the developing physiotherapy identity is most telling. The stronger the attachment the more it enabled the individual to ride the storms and challenges along the way. When one set of personal resources were threatened or overwhelmed, the successful participant was able to fall back on others to turn their aspiration into achievement (Kiernan, Proud & Jackson, 2015; Kiernan, Repper & Arthur, 2015). In section 1.1 citing the Chartered Institute of Personnel and Development (2012) it was suggested successful recruitment is about ensuring the right people are brought in to fulfil the aims and objectives of the given organisation or service. The findings of this study provides an enhanced understanding of what the 'right people' means in the context of physiotherapy education at this institution. It also provides a stronger foundation for the development of the Department's admissions strategy, and post-doctoral study.



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## APPENDICES

### APPENDIX 1: GLOSSARY OF TERMS

<b>Attitudes</b>	A state of being, manner or inclination influencing how individuals approach and respond to situations.
<b>Behaviours</b>	The way an individual behaves or acts in a particular context or under particular conditions.
<b>Disposition</b>	A particular type of characteristic or attribute exhibited by an individual, indicating their tendency to think and act or perform in a specific manner. Could be considered the nexus relating attitudes, values and behaviours.
<b>Self-awareness</b>	Having insight into one's personality, values, attitudes and behaviours.
<b>Self-concept</b>	Personally ascribed descriptors relating to a concept of "I"
<b>Self-esteem</b>	Personal regard one holds for oneself based on experiences of success and failure.
<b>Skill</b>	relates to the accuracy, consistency and efficiency of functional/purposeful movements.
<b>Values</b>	Individually held principles, or standards, that aid judgement of right and wrong, and how one should act in various contexts.

(Porter-O'Grady & Malloch, 2016; Entwistle & McCune, 2013; McCune & Entwistle, 2011; Rungtapiyakorn, 2008; Trew & Everett, 2005; Carr & Claxton, 2002)

## **APPENDIX 2: PARTICIPANT INFORMATION/CONSENT AND INITIAL CONTACT EMAIL** Participant Information Sheet (November 2013)

**Study Question: An exploration of students' learning journey experiences. Do they illustrate personal characteristics that influence progression through their physiotherapy degree programme?**

Dear Sir / Madam

My name is [name inserted] and I am [details provided] and currently undertaking a Professional Doctorate. I would like to invite you to take part in a research study. Before you decide, I would like you to understand why the research is being done and what it would involve for you. This should take roughly 5 minutes, although you can contact me using the details below if you have any additional questions or require clarification on any aspect of the project.

### **Part 1**

This study is seeking to evaluate a physiotherapy (PT) year groups' journey through their preregistration degree programme, from pre-admission to graduation. It is about the admissions criteria used to select applicants onto the [programme, cohort and university information stated] and the value of this data in predicting the students' journey (academic and clinical performance) from entry onto the degree to graduation. It also aims to find out about students' perspectives/views on how prepared they were for University and their chosen profession before starting and how the degree course is progressing. If you decide you would like/be willing to be involved, you will be asked to take part in 3 one-to-one interviews with me.

### **The purpose of the study**

I am undertaking this study to try to gain an understanding of the value of the data we use to select students. I am also very interested in the students' views on the positive and negative issues affecting their journey through the degree; and whether the data collected as part of the recruitment process has any predictive value in helping us identify those students who may require more focused support. I am interested in the positive and negative experiences/issues that influence students' during their degree journey.

### **Why have I been invited?**

You have been invited because you were successful in gaining a place on the [specific University degree programme identified] and have progressed into year 2 of that programme. Therefore, you have experience of the recruitment process and the first year of student life to be able to talk about the issues that have impacted on you.

**Do I have to take part?**

No, it is up to you if you are willing to take part. If you decide not to take part, there are no penalties that could affect your physiotherapy education, or future professional career. You can leave the study at any time without giving reason and again this will not adversely affect the standard of your education. You can decide whether to take part after reading this information sheet and discussing it with your Guidance Tutor or me, the researcher. If you are willing to take part, I will ask you to sign a consent form, although you can still decide to leave the study at any time.

**What will happen to me during the study?**

During the study you will be asked to attend an interview with me, the researcher, in one of the interview rooms here at the University. The day/date/time of the interview will be agreed with you to ensure it does not adversely affect your degree or personal commitments. I will re-check your willingness to participate before the interview commences, you will be able to refuse without fear of penalty. I will then ask you to tell me 'the story' of your interest in physiotherapy as a career, the application process and your first year on the degree programme. To make it clear, I am interested in your experiences both positive and negative. I will only intervene or ask questions to explore a point you raise or to confirm your meaning where this is not clear to me; and so you will be free to talk about what is important in your eyes. I will use a digital voice recorder to record your responses to aid the write-up of the discussion we have had. The intention is that the interview will be relaxed, with refreshments provided throughout. It is expected that the interview will last approximately 1 hour. You will be invited to a second interview once you progress into year 3. Once again, I will ask you re-confirm your willingness to participate before the interview and again you will be able to refuse without fear of penalty. Here the format would be the same except I would be asking you to tell the story of year 2 and progression into year 3 and your transition (development) through the programme. Finally, you will be invited to a third interview, towards the end of your 3<sup>rd</sup> year. I will re-confirm your willingness to participate and again you will be able to refuse without fear of penalty. The format of the interview will be the same, but the focus will be to reflect – look back over the issues and experiences previously explored but with a particular emphasis on your academic and professional development through year 3.

**What are the possible side effects of taking part?**

There are no side effects anticipated, however, if the discussion raises any concerns, your Guidance Tutor will be happy to help. Equally, if necessary the interview can be suspended or totally stopped and I, the researcher, can offer Pastoral/guidance support – directing you to your personal guidance tutor or to Student Support Services as required. If information were revealed that you would prefer not to be used in the study, then simply let me know at the time or within 2 weeks of the interview-taking place. You will be given an opportunity to see the transcript of the interview to verify the content, if

there is anything that you would prefer not to be used you can highlight it and it will be removed.

### **What are the possible benefits of taking part?**

I cannot promise the project will help you personally, although throughout the Programme, you are encouraged to be self-reflective and this study may act as a focus for some of that activity. However, analysis of your 'story' could help my understanding of our recruitment processes and in predicting student performance and identifying potential support requirements for future students.

### **What will happen to me after the study?**

Anything you say will be kept anonymous. The findings from the interviews will likely be published in a research journal and/or reported at a research conference. What you say and discuss during the interview maybe used by the researcher to aid understanding and draw conclusions; and some of your words maybe used to illustrate a key point in the findings, but this will be anonymised. Your education and progress through this degree programme will not be adversely affected by your participation in this study.

### **What if there is a problem?**

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in **Part 2**.

### **Will my taking part be confidential?**

Yes. I, the researcher, will follow ethical and legal practice and all information about you will be handled in confidence. What you say may be published, but this will be anonymised. The details are included in **Part 2**.

If the information in **Part 1** has interested you and you are considering being involved, please read the additional information in **Part 2** before making any decision.

## **Part 2**

### **What will happen if I do not want to carry on with the study?**

You can withdraw from the study verbally to me, the researcher, at any time, even after you have completed the interview. You can withdraw (request your data is removed) from the study any time up to 31<sup>st</sup> July 2016, after which the results may be published in a research journal. Any data produced from our interviews, will be destroyed 5 years post completion of the Doctorate no later than 31.07.2021.

### **What if there is a problem?**

If you have a concern about any aspect of the study, you can ring me and I will do my best to answer any questions. My telephone is [telephone number provided] If you remain



unhappy and wish to complain, you can do this by contacting my academic supervisor (Dr ..... ) [telephone number provided]

### **Will my taking part in the study be kept confidential?**

All information that will be used in the study will be kept in a locked filing cabinet at Northumbria University and kept strictly confidential. All data will be kept anonymous throughout the study, so that the data collected cannot be traced back to you. The research team (me, my two Doctorate supervisor's and one transcriber- audio-typist) are the only people who will view/listen to this data. The data listened to and viewed will be anonymised, so the only person who knows, who said what, will be me, the researcher. On 31.07.2021 all data collected as part of this study will be destroyed.

### **What will happen to the research results of this study?**

The results of this study will help to form a study looking at the relationship between admissions criteria and the students' journey through a physiotherapy degree programme; with an emphasis on their role in predicting academic and clinical performance/support needs in a physiotherapy degree programme; and be used to complete a doctoral research study. It may also be published in a research journal and or reported at a research conference. Any research results will be anonymous. If you wish to know the results of the study then you can by contacting me at the below address and telephone number after October 1st, 2017.

### **Who is organising and funding this study?**

I am organising and funding (supported by [university named]) the whole study as part of my Professional Doctorate.

### **Who has reviewed this study?**

This study has been read and passed favourably by the [University Ethics Panel named]

### **Further contact details**

1. If you would like to know more about this study, please contact me on telephone [telephone number provided] or my academic supervisor (Dr ..... ) [telephone number provided]
2. If you have any concerns about this study, please contact me on the details below

Yours Faithfully

**[Contact details provided]**

## **Consent form (November 2013)**

*For official use only*

Participant Identification Number	
Cohort Secondary Data collection	
Interview 1 /date	
Interview 2 /date	
Interview 3 /date	

**Title of research study: An exploration of students' learning journey experiences. Do they illustrate personal characteristics that influence progression through their physiotherapy degree programme?**

**Name of researcher – [name inserted]**

*Please initial each box*

1. I confirm that I have read and understood the information sheet dated November 2013, for the above study. I have had the opportunity to consider this information, ask questions and have had any questions answered satisfactorily.	
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.	
3. I agree to take part in the above study.	
4. I agree that my admissions data and progression data (year 1-2, year 2-3 and degree classification) may be used in this study.	
5. I agree to participate in three interviews (1 in year 2 and 2 in year 3) as part of the above study; and I am happy for this interview to be digitally recorded and for resulting information to be included in the study.	
6. I understand that my name and details will be kept confidential and will not appear in any printed documents.	

*Please enter your name and date and sign below:*

.....	.....	.....
Name of Participant	Date	Signature
.....	.....	.....
Researcher	Date	Signature

(When completed: 1 copy (original) for researcher file; 1 copy for participant)

**Initial Contact email post purposive dimensional sampling (29<sup>th</sup> November 2013).**

Dear

Thank you so much for consenting to be part of my research, your input is very much appreciated.

I have performed the purposive dimensional sampling and your name was drawn. I really do not want this to be onerous experience for you and will try very hard to keep our interview contact to no more than 1 hour.

I would like to perform the first interview before Christmas, but also do not wish to massively interfere with your revision.

If you are still willing to take part, could you indicate your availability on the following days (please specify best times for you on each of the days you may be available):

Monday 2<sup>nd</sup> December

Friday 6<sup>th</sup> December (between 9-1.00)

Monday 9<sup>th</sup> December

Tuesday 10<sup>th</sup> December

Wednesday 11<sup>th</sup> December

Thursday 12<sup>th</sup> December (between 9-3.00)

Friday 13<sup>th</sup> December (between 10-2.00)

Thanks once again

**[Contact details provided]**

### APPENDIX 3: ADMISSIONS DATA COLLECTION PROFORMA

Code: .....

Interview Date: .....

Programme: **BSc (Hons) Physiotherapy** ☐

Date of Birth: .....

Age@ start: .....

Married: .....

Children: .....

English not first language:

.....

Post Code: .....

IELTs / equivalent: .....

QUALIFICATION	SUBJECT	GRADE	COMMENTS / UCAS Tariff Points
Compulsory Education (GCSE's /Equivalents)			
Post-16 Education (A' Levels / Equivalents)			
			<b>Total UCAS Points:</b>
<b>Reference 1</b>	<b>Academic</b> <input type="checkbox"/> <b>Employer</b> <input type="checkbox"/> <b>Character</b> <input type="checkbox"/> <b>Satisfactory</b> <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> Characteristic/s:		
<b>Reference 2</b>	<b>Academic</b> <input type="checkbox"/> <b>Employer</b> <input type="checkbox"/> <b>Character</b> <input type="checkbox"/> <b>Satisfactory</b> <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> Characteristic/s:		
<b>Personal Statement</b>	Health/Physiotherapy related work experience <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> Characteristic/s: Previous employment <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> Characteristic/s:		
<b>Prog. Progression</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
<b>Academic</b> GPA (at 1 <sup>st</sup> sit)			
<b>Placement</b>			
Communication			
Professionalism			
Assessment/Reasoning			
Monitoring/evaluation			
Risk			
PEC's:			
<b>Degree Classification:</b>			

APPENDIX 4: PICTORIAL TIME-LINE DIAGRAM USED FOR EACH INTERVIEW PHASE (1-3) OF THE STUDY

Participant Identification Number		Interview 1 /date	
-----------------------------------	--	-------------------	--

I invite you to use this 'Pictorial Timeline' to aid your memory of the period of your learning journey from the start of your interest in physiotherapy as a career, through the application process, to 'completion of year 1 of the Programme. The faint broken line between the two points separates positive experiences/influences (space above the line) from the negative experiences/influences (space below the line); simply mark a cross on the timeline and make a note of what it relates to. It does not matter if there are more **X**'s in one space compared to the other; this is 'Your Story'.

Positive (+)

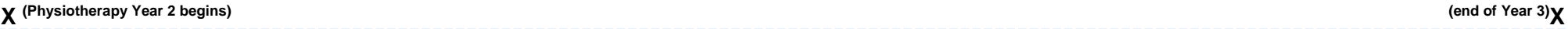
**X** (Physiotherapy as a career?) (End of Year 1) **X**

Negative (-)

Phase 2 Pictorial time-line diagram

Participant Identification Number		Interview 2 /date	
-----------------------------------	--	-------------------	--

Positive (+)



Negative (-)

Phase 3 Pictorial time-line diagram

Participant Identification Number		Interview 3 /date	
-----------------------------------	--	-------------------	--

Positive (+)

X (beginning of year 3) (Graduation & Overview of the 3 years) X

Negative (-)

## APPENDIX 5: TABLE OF DEFINITIONS RELATED TO THE CONCEPT OF FITNESS TO PRACTICE

Fitness to practice		
Term	Definition	Reference
<b>Professionalism</b>	Professionalism emerges from 'profession', one who 'professes' to be knowledgeable and skilled in and to follow; a 'vocation' in which the professed knowledge is used for the benefit of others; or a calling through which they earn a living. It demands authority over specific knowledge and skills, which is sanctioned by society based on a commitment to service. For doctors the challenge is to balance the obligations as healers and professionals. Teaching of professionalism should incorporate the notion that to be a professional is a privilege not a right. Professional status is society's way of organising the delivery of services; professionalism is an ideal to be pursued with altruism as an essential component; professional behaviour is essential to maintain trust between healer and society; knowledge of codes of ethics and conduct; nature of autonomy; understanding the link between professional status and the obligations to society.	Cruess & Cruess (1997, p. 1674)
	Defines the manner, conduct and organisation of professional work through the application of sophisticated skills to address the needs and problems of the community; thus maintaining the status of that profession and can be considered simply as professional behaviour.	Richardson (1999a, p.464)
	A set of attitudes and behaviours associated with a particular occupation; the active demonstration (behaviours) of traits of a professional; attitudes and behaviours that maintain patient interest and professional self-interest; values, beliefs and attitudes putting the needs of other ahead of personal needs	Hammer (2000, p. 455)
	A balance between the nature of a profession, which is pursued for the benefit of others through the application of expert knowledge and skills; and the values and behaviours demonstrated when undertaking professional work through the interactions with patients, their families and other health and social care professionals. To be considered professional the individual must be able to demonstrate they are worthy of societies trust (status) that they will work morally and ethically for the good of society (altruism)	Swick (2000, p. 612-13)
	There is a classic triad of professionalism consisting of intellect and technical expertise, autonomy and practice regulation and the commitment to public service. Threats to independence of practice can be countered by the clear commitment to serving the interests of service-users embodied in the compassionate care of individual patients and communities.	Stephenson, Higgs & Sugarman (2001, p.867)
	Elements of professionalism include: reliability and responsibility, honesty and integrity, maturity, respect for others, critique, altruism, interpersonal skills and the absence of impairment; self-improvement and adaptability; accountability at multiple levels – practitioner-patient relationship, the profession and society; excellence suggests exceeding ordinary expectations; and a commitment to life-long learning. Duty is willing acceptance of a commitment to serve. Autonomy and self-regulation. Humanism is an over-riding element with a central concept of empathy – There is no single reliable and valid method of assessing professional behaviour	Arnold (2002,p. 503-504)



	Provides a needed service, which is transparent, accountable and positively responsive to internal and external requirements or developments.	Morris (2002, p.362)
	A form of moral and altruistic 'service' based on occupational membership in which the public place trust in professional workers to discharge their duties in the best interests of society; professionalism compels the professional workers to be worthy of such trust and in return they are rewarded with autonomy and higher status.	Evetts (2003, p. 399-400)
	A concept with a long history and multiple meanings both positive and negative. The negative view centred on a perceived conflict between altruism and self-interest, in which professions appeared powerful, privileged self-interested and protectionist monopolies, even in the face of incompetence or illegal practice. This challenged their value to society as a vocation towards engaging in specialised work for money. The positive reclamation of professionalism included a refocus on humanistic values, which place the patient and community at the heart of professional interests.	McNair (2005, p. 457)
	A reflective practitioner who acts ethically. The personality trait of conscientiousness appears to be a telling component of professionalism, or conversely its absence is a significant component of a lack of professionalism.	McLachlan (2010)
	Professionalism is not a discrete competency, or a defined set of characteristics, but the expression of situational judgement in which a set of behaviours are influenced by context.	Bayley (2011)
	The Code of members' Professional Values and behaviours promotes professionalism and by accepting it, it demonstrates commitment to all, who members' interact with in their physiotherapy role and to maintaining and enhancing the reputation of the profession and to fulfilling the social responsibilities of physiotherapy. Four principles encapsulate the professional values and behaviours: taking responsibility for actions; behaving ethically; delivering an effective service; and striving to achieve excellence.	CSP (2011, p. 6)
	Professionalism is linked to quality of care and protection of the public that is not addressed by simple competency testing. However, it is not well defined in academic literature, with a tendency to view it as competencies amenable to teaching and development that can be measured, but with no consensus on validity. Suggestions for inclusion as measures of professionalism are: ethical practice; interactions with service-users; interactions with colleagues; reliability; and commitment to ongoing improvement. Views of professionalism are wide ranging, although quite consistent across the professions, including aspects of behaviour, communication and appearance. It was considered a complex construct, or meta-skill with multiple components; grounded in the individual's values (personal identity) developed through their life experiences prior to choosing their professional career path. The attraction to a particular profession is a perceived fit between the personal and professional identity. The work context is significant in shaping professional behaviour and developing the professional identity through identification and modelling by the workplace culture. Views around the 'right sort of person' being attracted to professions links the ideas of congruity of personal and professional identity, but also implies 'personality type or trait' may be influential and amenable to testing. The existence of professional codes of conduct is a prescribed minimum standard, which should not be violated but must be contextualised within practice. Therefore professionalism maybe better considered in terms of the	HPC (2011a)

	interaction of the individual and context, comprising situational awareness and contextual judgements; not simply knowing what to do, but when to do it	
	The demonstration of desirable behaviours including reflective skills, time management, interprofessional skills, reliability and responsibility, maturity, critique (accepting criticism, objective self-awareness, action to correct shortcomings), communication skills (appropriate use of language, listening skills, emotional awareness), respect for others. Upholding professional values, which are the unquestioned propositions on which a profession is realised. These include, altruism, accountability, excellence, duty, honour and integrity and respect for others, compassion, continuous improvement and working in partnership. Such core values 'to do what is right every time' act as internal motivators surmounting external motivators of reward and sanction. Demonstrating desirable attitudes, which are dispositions to respond positively or negatively towards objects, concepts, people or situations and may incorporate three components, cognitive (beliefs and ideas), affective (emotions) and behaviours (predisposition to act in a certain way in certain situations).	Aguilar, Stupans & Scutter (2011)
	In relation to professionalism in physical therapy Jette and Portney (2003) identified 30 behaviours, but narrowed them down to: a commitment to service; ethical standards; demonstrate humanistic values e.g. integrity, honesty, respect for others, compassion and altruism; responsibility and accountability; committed to professional advancement.	Boak, Mitchell & Moore (2012, p. 12)
	Professionalism is a fluid concept encompassing more than simple rules and is hugely affected by context. It goes beyond notions of mastery of competencies, which tends to 'fix' or stagnate professionalism. It is a requirement to make context specific judgements and clinical decisions and as such is informed by professional identity, which is synonymous with knowing what one stands for and what one will take responsibility for.	Trede (2012, p.162)
	Research into professional behaviours of healthcare students often focuses on negatives such as placement problems and disciplinary issues, suggesting a lack of 'professionalism' may be easier to understand.	Bradley (2013, p. 201)
	"Our National Health Service and public health services' first priority must be the public that we serve. It is the commitment, professionalism and dedication of the NHS and public health staff that can make the greatest difference in providing high quality services and care for patients and their families". The Francis Report reinforced the need to educate, train and recruit staff with the right skills, values and competencies to deliver high quality compassionate care.	DH (2013, p. 3)
	It is both a complex and evolving concept, which has moved from simplistic competency-based constructs enshrined in ideas of specialist knowledge and skills, regulated by professional codes of conduct and ethics, towards notions of professional autonomy. This includes a requirement for reflective practitioners, with highly developed communication and interpersonal skills and a strong commitment to CPD and accountability to the profession and to society. Desirable behaviours such as honesty, integrity, responsibility and accountability, self-awareness and self-improvement and awareness of scope of practice, collaborative working, respect for others, compassion and empathy can be viewed mechanistically as aspects of a professional code. However, in an evolving person-focused professional practice model such behaviours may be considered the manifestation of personal qualities within professionally focused relationships. Thus, the relationship between professionalism, professional	Grace & Trede (2013, p.793)

	values and professional identity is central in guiding clinical decisions and actions. Developing professionalism is a life-long undertaking which itself requires a capacity to learn from practice, strength to question the status quo and an ability to reflect, analyse and embrace change individually and collectively.	
	Complex construct related to behaviours, core values, ethics and notions of public service; distinct skills; situational awareness, contextual decision-making; accountability; cultural awareness and patient-centeredness (respecting the patient as a unique individual and treating them with empathy and responsiveness to their preferences, needs and values).	McVeigh (2013, p.55)
<b>Profession</b>	The characteristics of a profession may be considered in three broad groups. Conceptual characteristic, which relates to the central mission or purpose of the profession. Performance characteristics, which includes mastery of theoretical knowledge and practical skills, the ability to solve problems, the ability to utilise theoretical knowledge and skills in practical situations, personal & professional enhancement. Collective identity characteristics, including, prescribed education & training, credentialing (licence to practice), creation of a professional subculture, legal protection, public affirmation, ethical practice, disciplinary procedures, relationships with other professions, relationships with service users.	Carter & Lubinsky (2016, p. 3)
<b>Professionalisation</b>	Is the character of a profession working towards the achievement of professionalism notably in response to threats, competition or change and thus embodies development of knowledge and skills relevant to the community it serves. The process implies not merely mastery of the professional function but continued professional development to ensure continued community relevance; and therefore life-long learning is central to the notion of professionalisation.	Richardson (1999, p.464)
	Clarification of knowledge associated with a profession, which is grounded in science. Can be viewed critically as the means of indoctrination into the values, ethics and practice of a profession; or, the outcome of professional socialisation in which the individual internalises the values and beliefs of that profession whilst expressing its key behaviours and attitudes.	Sparkes (2002, p.482-3)
	Central to the notion of professionalisation is the establishment of a specific regulating body.	Sparkes (2002, p.482)
<b>Professional socialisation</b>	Individuals learn and assimilate the values, attitudes and philosophy of a chosen profession and commit to that profession through a process of contextual social exchange.	Richardson (1999a, p.463)
	This is a process in which individuals acquire the attitudes, values, skills and knowledge, or the culture currently promulgated by the group they belong, or seek to join.	Hammer (2000, p. 455)
	Analogous with the development and maintenance of a professional identity, which is a perception of shared knowledge and skills, understandings, experiences and ways of both perceiving and addressing problems. The identity is promulgated and propagated through common educational experiences, specific professional training and authentic practice exposure and membership of specific professional associations or organisations, which establish and maintain a specific culture.	Evetts (2003, p. 400-401)
<b>Professional suitability</b>	Currer (2009) suggests it is undefined and undefinable and that 'unsuitability' maybe understood as judgements made in relation to specific cases and contexts. Tam and Coleman (2009) developed a five-dimension scale to evaluate professional suitability amongst social workers comprising overall suitability; analytical suitability; practice	Boak, Mitchell & Moore (2012, p. 14)

	suitability; personal suitability and ethical suitability. In social work professionally suitable behaviour includes belief in the values and goals of the profession; caring and sensitive in all professional relationships; ability to respond to the client in authentic ways with attitudes, beliefs and behaviours that ensure dignity and worth; oral and written communication competence; ability to work independently and as part of a team. There must also be a personal capacity for change and openness to learning; acceptance of professional ability, personal integrity and attitudes.	
	Being fitted for the purpose of, providing specific professional services to the public, which incorporates demonstrating, to agreed standards, specific knowledge, skills, values and behaviours. 'Suitability' is often understood in terms of 'unsuitability'.	Bradley (2013, p. 200)
<b>Professional competence</b>	The demonstration of knowledge skills and attitudes compatible with competent clinical practice. However, clarity is compromised by different notions of 'competence'; on the one hand, the mechanically effective and efficient performance of a role/task judged against predetermined behavioural criteria. On the other hand competence may be viewed as the extent to which an individual personifies the values, attitudes and behaviours of their specific profession	Cross & Hicks (1997, p. 250)
<b>Fitness for purpose/practice</b>	Concept about the suitability and qualification of individuals to work in a specific professional role. It relates more specifically to notions of competence and capability in performing duties; and is connected with regulatory body obligations to protect service-users of that profession. A sense of pride in the professional identity is fundamental in motivating continued striving for fitness for practice and purpose; but clearly a commitment to continuing professional development (CPD) is a key strategy in facilitating career long 'fitness for purpose'.	Warne (2002, p. 219 & 222)
	Mandatory teaching & development of certain clinical skills that are rigorously tested to an agreed standard is required to ensure nurses are fit for practice and purpose.	Bradshaw & Merriman (2008, p. 1267)
	Relates to increasing concerns for patient and public safety.	Tee & Jowett (2009, p. 445)
	Students have the necessary health and character to be able to practice safely and effectively once registered. They must have the ability to act appropriately with those they are in contact with when they are training, including service users	HPC (2011b)
	Judged against the professional regulators code of conduct	Unsworth (2011, p. 466)
	'Fit to practice' means having the skills, knowledge and character needed to practice safely and effectively. It includes acting in a manner that may affect public protection, or confidence in the profession, or in the regulatory process; which could relate to matters outside professional practice.	HCPC (2015, p. 1)
	They have the skills, knowledge, character and health needed to practice safely and effectively.	HCPC (2016, p. 11)
<b>Good Character</b>	Character is accepted as a set of dispositions reflected in the individual's behaviour; however, this acceptance is based on assumptions of a causal link between character and action. Challenge is identifying those who genuinely engage with and accept the detail of the Code of Professional Conduct, rather than simply avoiding transgressing it.	Sellman (2007, p. 763)

	Being registered shows practitioners meet our standards for that profession and demonstrates to the public that they are fit to practice and entitled to use the protected title for their profession. Health and character checks ensure the applicant/registrant will be able to practice safely and effectively; and enables action to be taken if health and character raise concerns about this ability. The relationship between registrant and service user is based on trust, checking health and character reduces the risk of harm and supports the public's trust. Checking is ascertaining whether there is evidence of past actions suggesting the registrant is not of 'good character', such as untrustworthy, dishonest; or have harmed a service user or member of the public; or have acted in such a way to decrease the public's confidence in that profession.	HPC (2009, p. 4)
	Good health and good character are fundamental to safe practice and public protection and relate to the professionals' conduct, attitudes and behaviours. Good character is a notion relating to the Nursing and Midwifery Councils Code of Professional Conduct requirement for honesty and trustworthiness and the capability to discharge their professional duty safely and effectively without supervision.	Unsworth (2011, p. 466)
	Broad and difficult to define. The Council for Healthcare Regulatory Excellence (CHRE) (2008) point out it is a term not widely used outside English-speaking countries. They suggest four indicators that question an individual's good character' including acting in such a way that: risks the health and safety or wellbeing of a patient or other member of the public; undermines public confidence in the profession; indicates unwillingness to act in accordance with professional standards; is dishonest.	Boak, Mitchell & Moore (2012, p. 16)
<b>Core Competencies</b>	Demonstrate professional integrity and commitment to the well-being of all clients; model professional practice including service delivery, education, research and management; addressing issues of patient and staff safety in all aspects of practice – an expert will make their PT diagnosis applying theory and practice. Entry level competency for PTs in Canada are professional accountability, client assessment, diagnosis and intervention planning, implementation and evaluation of interventions, communication and interdisciplinary practice and organisation and delivery of PT services	Verma, Paterson & Medves (2006)

APPENDIX 6: THEME IDENTIFICATION RECORDING FORM ADAPTED FROM RAPID IDENTIFICATION OF THEMES FROM AUDIO RECORDINGS (RITA) APPROACH (NEAL *et al.*, 2015, P. 122).

Participant ID: \_\_\_\_\_.

Interview Phase 1 / 2 / 3 (circle)

	Timeline Participant Responses may be + (positive), - (negative), 0 (neutral)																							
Themes																								
1.																								
2.																								
3.																								
4.																								
5.																								
6.																								
7.																								
8.																								
9.																								
10.																								

APPENDIX 7: PARTICIPANT LEARNING JOURNEY SECONDARY DATA ANALYSIS

Case 1: (20-year-old female - mixed entry) secondary data Programme overview = challenged learning journey

Positive (+)

Year 1		Year 2		Year 3	
Academic	Placement	Academic	Placement	Academic	Placement
GPA 60	"A quick learner with good attitude to learning; personality & communication skills to be a very good physiotherapist, passed to very high standard"	GPA 55	"Delightful, enthusiastic well behaved, punctual, good interprofessional relationships, responded well to feedback, keen & hard working, enthusiastic team member"	GPA 58 (2.2)	"Pleasure to have as part of team, excellent communication with complex patients, "very professional at all times, good clinical reasoning & handling skills, exceptional reasoning"
X (Sept 2011)		Sept 2012 (Restart Sept 2013)		Sept 2014	(June 2015) X
		Personal health problems caused suspension of studies April 2013 On restart failed PT0501 (Dec 2013) but had PEC's and passed re-sit Brief return of ill-health during CP5		Intermittent bouts of ill-health throughout year	

Negative (-)

**Case 2: (49-year-old male – mixed entry) secondary data Programme overview = challenged learning journey**

**Positive (+)**

Year 1		Year 2	
Academic	Placement	1 <sup>st</sup> attempt (Sept 2012-Feb 2013) Academic	2 <sup>nd</sup> attempt (Sept 2013-Jun 2014) Placement
	"Fitted in well, professional at all times, keen to learn, asks questions, excellent communication skills, motivated to improve"		
<b>GPA 46</b>			
X (Sept 2011)		Sept 2012	Sept 2013
			(Jun 2014) X

<b>Struggled to integrate with a peer support/ study group. Worked part-time</b>	"Needs to work on knowledge, clinical reasoning falls down, needs to focus on patients' problems & clinical presentation"	<b>GPA 18</b> <b>Struggled to integrate with a peer support/ study group. Worked part-time</b>	<b>1<sup>st</sup> Attempt</b> "Unable to follow guidance, must do independent study, must be able to gather essential information & understand relevance, safety concerns, not meeting learning outcomes" <b>failed Placement CP3</b> <b>Suspended studies due to personal health issues</b>	<b>GPA 34 (Cert HE)</b> <b>Struggled to integrate with a peer support/ study group. Worked part-time</b>	<b>Repeat CP3 (Feb 2013)</b> "unable to formulate basic problem list, difficulty retaining information, appears poorly prepared, requires high levels of support" <b>Student left Placement</b> <b>Elective placement (Jun)</b> "needs to demonstrate evidence of background research, needs to develop structure & theoretical underpinning, must be able to reproduce outcome measures" <b>Student withdrew from the programme</b>
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**Negative (-)**



**Case 3: (31-year-old, male – standard entry) secondary data Programme overview = smooth learning journey**

**Positive (+)**

Year 1		Year 2		Year 3	
Academic	Placement	Academic	Placement	Academic	Placement
<b>GPA 80</b>	“High level of knowledge, manages practice effectively, empathetic, asking appropriate questions, reflective, awareness of risk & safe practice, outstanding student”	<b>GPA 79</b>	“Excellent communication skills & knowledge, fitted well into Team, outstanding student, natural rapport with patients & carers, excellent hands-on, aware of own limits”	<b>GPA 81 (1<sup>st</sup>)</b>	Excellent communication & good rapport with clients, excellent attribute to placement, uses initiative, professional, good use of problem lists & tailored interventions, good assessment & clinical reasoning”
X (Sept 2011)		Sept 2012		Sept 2014	
				(June 2015) X	
Close relative diagnosed with terminal illness April 2015					

**Negative (-)**

**Case 4: (18-year-old, female – Standard entry) secondary data Programme overview = relatively smooth learning journey**

**Positive (+)**

Year 1		Year 2		Year 3	
Academic	Placement	Academic	Placement	Academic	Placement
GPA 61	“kind approachable manner, keen & enthusiastic, synthesises prior knowledge with presenting complaints, reflective”	GPA 58	Effective communication, mature, polite, professional, reflective, good decision-making working within scope of practice shows insight”	GPA 63 (2.1)	“Good in stressful environment, excellent communication very professional, progressed quickly, responsible for own case load, shows empathy & rapport, well prepared, takes responsibility for CPD”
X (Sept 2011)		Sept 2012		Sept 2014	
				(June 2015) X	
Extremely homesick semester 1		Illness/operation and unenjoyable placement experience Jan/Feb 2013			

**Negative (-)**

**Case 5: (18-year-old, female – standard entry) secondary data Programme overview = challenged learning journey**

**Positive (+)**

Year 1		Year 2		Year 3	
Academic	Placement	Academic	Placement	Academic	Placement
	"Good rapport with staff & patients, professional at all times"		"Excellent communication, good team-working, professional at all times, assessment, reasoning & treatment have improved, overall excellent student"		"Excellent communication, enthusiastic, reliable, organised, professional assessment, reasoning & treatment improved, effective practitioner"
GPA 47		GPA 49		GPA 48 (3 <sup>rd</sup> )	
X (Sept 2011)		Sept 2012		Sept 2014	(June 2015) X
Failed PT0401 & PT0403 passed on re-sit Very homesick		Terminal illness and death of close family friend and death of close relative several weeks after this. Poor placement experience Jan 2013		Close relative death April 2015	

**Negative (-)**

**Case 6: (20-year-old, female – mixed entry) secondary data Programme overview = relatively smooth learning journey**

**Positive (+)**

Year 1		Year 2		Year 3	
Academic	Placement	Academic	Placement	Academic	Placement
GPA 53	“Excellent communication, extremely professional, well-motivated, excellent team member, self aware of own development, will be a credit to the profession”	GPA 61	“Good communication skills, appropriate professional approach, responds well to feedback, respects clients & other members of team, worked within scope of practice”	GPA 58 (2.1) (Inc. element of Yr. 2)	“Good communication skills, motivated & organised professional, good theoretical knowledge linked to practice reflects & learns from experiences, safe in practice”
X (Sept 2011)		Sept 2012		Sept 2014	(June 2015) X

III health post CP1 over Christmas period prior to January exams

**Negative (-)**

### Positive (+)

### Negative (-)

**Case 8: (18-year-old, male – standard entry) secondary data Programme overview = relatively challenged journey**

**Positive (+)**

Year 1		Year 2		Year 3	
Academic	Placement	Academic	Placement	Academic	Placement
<b>GPA 64</b>	“Excellent communication skills, fitted in with team, professional behaviour, smart, polite, knows when to give patients privacy & when to give support”	<b>GPA 56</b>	“Communicated well with MDT & players, good time-keeping & reflection, performs good full assessment, professional standards, good treatment plans, patients’ reached functional goals, risk management excellent”	<b>GPA 66 (2.1)</b>	“A pleasure on placement, good interpersonal & communication skills, gains patients’ confidence, managing ward & prioritising patients’, professional, treats complex pts to adequate standard, good treatment plans”
X (Sept 2011)		Sept 2012		Sept 2014	
				(June 2015) X	
		PT0500–36 (Pass re-sit)		Personal circumstances emerged in semester 2	

**Negative (-)**

**Case 9: (37-year-old, male – non-standard entry) secondary data Programme overview = challenged learning journey**

**Positive (+)**

Year 1		Year 2		Year 3	
Academic	Placement	Academic	Placement	Academic	Placement
<b>GPA 61</b>	“Confident communicator approachable, personable & professional, understands risk & applying theory into practice, well prepared, good pt. rapport, worked ethically, respected all client groups”	<b>GPA 62</b>	“Excellent communication skills, professional behaviour, clinical knowledge, good clinical reasoning, organised, takes responsibility for actions”	<b>GPA 61 (2.1)</b>	“Worked well in MDT, good communication skills, good written notes, very professional, improved assessments, reasoning & interventions, good handling, monitors & evaluates interventions, safe practice”
X (Sept 2011)		Sept 2012		Sept 2014	
				(June 2015) X	
Close relative diagnosed terminal illness Jan, died Mar		“needs to relate knowledge to clinical problems”  Birth of second child towards end of CP5			

**Negative (-)**

## APPENDIX 8: TABLE OF DEFINITIONS OF PERSONAL CHARACTERISTICS AS CONCEPTUALISED BY THIS STUDY

Characteristic	Definition
<b>Ability to form interpersonal relationships</b>	The ability to balance social relationships and active learning with and from others. Healthy relationships are when there is neither total independence nor total dependence on others. The individual can acknowledge the value of observing and emulating others; as well as using others as sources of support especially at times of challenge. Understanding when they need to study/learn on their own and confident and capable to do so (Deakin Crick, Broadfoot & Claxton, 2004).
<b>Resilience</b>	The individual is stimulated not daunted by challenges and tend towards a 'give-it-a-go' attitude. They acknowledge the learning journey is difficult at times for everyone and are therefore not intimidated or overawed when encountering challenge. Recovery from frustrations, difficulties or disappointments is swift. They are tenacious even when experiencing confusion or anxiety that they lack understanding of how to proceed. They acknowledge their mistakes, accept responsibility for and can learn from them, often from critical feedback (Deakin Crick, 2007).
<b>Conscientiousness</b>	Associated with a drive to succeed, taking responsibility for decisions made and resultant actions. It is synonymous with planning and organisation, diligence, reliability, trustworthiness and a tendency to adhere to rules and shared values (Richardson, <i>et al.</i> , 2009; Carver & Connor-Smith, 2010)
<b>Reflection</b>	It is a form of knowledge production based on focused attention on our personal thoughts and memories in order to make sense and learn from them. The resultant insights from the critical attention to experiences informs everyday actions enabling the individual to make contextually appropriate changes if indicated (Bolton, 2014; Taylor, 2010; Alvesson & Sköldbberg, 2009)
<b>Caring</b>	Relates to being friendly and helpful; and have a tendency towards preserving and enhancing the well-being of others. It also relates to being empathetic and the ability to inhibit negative feelings. Is associated with social and cultural sensitivity and treating people as individuals with respect. Additionally, being an advocate for patients and embracing the patients physical, emotional and psychological care needs in order to make a difference to their lives, thus emphasising the holistic nature of the profession. (HCPC, 2016; Carver & Connor-Smith, 2010; Schwartz, 1994).
<b>Positive attitude to learning</b>	Individuals with a desire to learn and view this as a lifelong process in which they gain satisfaction. Learning challenge is viewed positively as an opportunity of getting better over time. The tendency is adopt deep learning rather than surface learning approaches and tend to be critical about knowledge wanting to reach their own conclusions; and therefore they tend to take ownership of and therefore an active role in their learning (Deakin Crick, 2007)



## APPENDIX 9: PHASE 1 INTERVIEW DATA MATRIX EXAMPLES OF THE EMERGENT PERSONAL CHARACTERISTICS.

Participants	1 Conscientiousness	2 Resilience	3 Reflection
<b>Case 1</b>	<p>"Semester 2, was a lot of written work it was all sort of assignment based and referencing wasn't awesome, I'm not great at that as I have discovered, it was highlighted to time management..." (C1/S20/L1<sup>1</sup>)</p> <p>"...I was a lot happier to get the work done cos, I have done all that [socialising], so I [wanted to] get a degree and it was hard enough anyway." (C1/S28/L6<sup>0</sup>);</p>	<p>"...I think college was a push to become a physio because there was very unmotivated people there...they didn't really have any particular goals...so it was motivating in that I knew I wanted to be a physio..." (C1/S6/L6<sup>+</sup>);</p>	<p>"...feedback [is important] so you can see exactly where your weakness have lain...with neuro it was good as a written exam to have, a lot more detailed feedback..." (C1/S24/L4<sup>+</sup>);</p>
<b>Case 2</b>	<p>"...it's a multitude of factors...getting a call and having to do some engineering orders and do my VAT [laugh] and do my books, I need to keep that up to date, get the invoices out and chase the money, that didn't help however; I did put time into the studies..." (C2/S31/L1<sup>0</sup>);</p>	<p>"...I run an... [named] business at home...I have had to keep that going, cos it pays the bills; I was gradually introduced back into education and it was a great introduction because wasn't sure if I could do both and I think it's working out well; but the business has slid down a bit and I intentionally did want it to slide down anyway so as I wanted to focus all my efforts on my physiotherapy." (C2/S7/L2<sup>0</sup>);</p>	<p>"I definitely was floundering, the amount of information I had to retain...when I went to university initially I used mind maps which were great, but the mind maps were not for this [laugh] for the exams, so I had to try other things and it was interesting I started to put pressure on myself and that wasn't good and it resulted in very poor to average marks and that was disheartening cos I wanted to get, I got a 2.1 for my engineering degree and I wanted to get at least a 2.1 for this; and that just didn't marry up now, cos I was just scraping through and the average mark was about 43 or 47 and I even failed one of the exams, the neuro one...but it was still uncomfortable." (C2/S25/L1<sup>+</sup>);</p> <p>"Well, I had a tutor and I wasn't comfortable with the tutor, and I should have been loud enough to have to say, "I want to change the tutor", nothing wrong with the tutor, and you know we got on, so there's no hatred or animosity between us, it's just I did not feel comfortable, I wasn't getting the best out of me, on the tutoring bit, and perhaps I should have changed, so that I think if I had changed to someone who I could be more open with, then I think that might have been helpful for me." (C2/S49/L1<sup>+</sup>);</p> <p>"...I quite enjoy essays, you know, but I'm still to find, you know, the right format to get decent marks, but I do enjoy practical and I can understand the need for it, but I guess that's my biggest disappointment, that I wasn't doing well in the practical; and I must have treated about 4 or 500 hundred people with their shoulders, and the exam I got was about the shoulder, and I messed it up, I just couldn't believe it [laughing] ...I think I over-worry about it, I don't know there's something changed in my body err..." (C2/S51/L1<sup>+</sup>);</p>

<p><b>Case 3</b></p>	<p>“...I think we've definitely got a very strong approach and a very practical approach to it...we have these sessions...before you start anything...the first sessions are always, literally its more arguments and insults than learning because it's just hammering it out, giving our opinions and everyone shooting everyone down, but at the end of it you got a table or something and its good, it's much more structured especially when we're dealing more with the evidence stuff now, people are getting assigned tasks and we are pooling information a bit more, and everyone's understanding that if you are going to do it you ought to bring something to it, no one is going to show up and get what everyone else did...” (C3/S52/L6*);</p> <p>“...everyone learns differently...but practical skills you have to practice, it's almost in the word...you could know everything about it but if you can't do it you are not any good at it really...that's the thing that we've worked that out, we now need to go away and actually learn about this and come back and talk at each other about it, and practice it...refine it...but it's definitely a challenge, keeps you busy.” (C3/S58/L4*);</p> <p>“...I definitely have a much better work-life balance this year because I am living with friends...I went to a pub quiz with a housemate last night...I had been working from 9 'til 6...so I was able to go out for a couple of drinks and a pub quiz...but I would consider it a healthy distraction...but...if I hadn't gotten a lot done...I wouldn't have done it...I am mature enough to know...when I shouldn't go out and enjoy myself...I am either studying or not, and I think that makes me more efficient when I'm studying, because my body and my brain knows...it's time to study...you need to have the two.” (C3/S72/L1*);</p> <p>“...there was one exam and I got 70 which is a great mark so my housemates tell me, but I was disappointed with the 70 to a point...cos my peer group all did better than me...I am the least competitive person you'll meet...but [pause], I wish I did better, but even reflecting on it...even at the time I knew that I had worked for it, I had tried, so what more can you do...that's definitely a trait that makes me good at this...I am very good at letting things go, I don't let things stew...” (C3/S84/L2*);</p>	<p>“...your own beliefs and how you approach things...definitely affects how you work...the respiratory module last year, I let that get away from me, a little bit, I remember thinking...for a couple of days... “I've no idea what's going on here...I need to get this back, to a comfortable level... I need to do something about this”, as opposed to, “this is so awful I'm not going to look at it” ...especially with the exams, that kind of thing happens... “I am so far behind in my preparation”, you end up not doing it...as opposed to actually engaging with it and doing it, do something, even the smallest thing...if you don't know what to do, do anything and at least you've made a start...I wouldn't say first year was easy...I think it's probably well-structured and...it is a challenge...and, I remember long nights and long days...early mornings of study and practice and, [pause] like I said not getting nervous definitely counts in my favour...” (C3/S64/L1*);</p>	<p>“...from a personal perspective [elbow injury] I saw good physiotherapy and the positive effects of a very good, very motivational physiotherapist, and I think that I have learned a lot from it, which I will bring into my own practice definitely...” (C3/S16/L2*);</p> <p>“I had better medical care in the Third World than I got in [named country] and it is one thing to see good practice, it's a whole other thing to know bad and to receive bad, it's a very formative thing, especially if you are going to work in it.” (C3/S20/L1*);</p> <p>“I have made a good bunch of friends on the course, and they are more mature and everyone is on the same level, and...there's a bunch of us hang out together and that bunch practice together quite a lot, and there is a massive support from that...coming back [into education], maybe a little bit unsure, especially coming back without the biology, I was a bit kind of freaked out about that, but just the fact that having support, peer support is huge...and...that...didn't happen on my last degree, cos it's a totally different learning experience what I am doing now...” (C3/S50/L13*);</p>
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<p><b>Case 4</b></p>	<p>"I think all physio's kind of come in with a similar mind set, kind of we're all quite driven and we are not naive about work...it comes with the territory...there's always the enthusiasm factor, that's a common thread with everyone in the course I found anyway, and it's quite infectious, so it is good to be around people that also do what you do, I think it's kind of just splitting your time, is what's important and I've managed to do that this year..." (C4/S33/L5*);</p> <p>"first semester in first year was quite full-on, we didn't have time off...and it needed to be like that, so I told myself..." just get on with the work" ... I think I've grown up a lot over the past year...prioritising...and it is good to get out and let your hair down and blow off some steam, but at the same time, I don't miss it really it's good to get a night out every so often of course, I mean stress and things, it's not good to bottle up, but...this is what I want to do and that's why I'm here at university, and after I qualify I'll still be a young person that can do things, so I don't really think of it as much of a sacrifice, because it is only 3 years of my life and in the long run that's really not very long..." (C4/S37/L1*);</p>	<p>"... [response to initial academic struggles] it was just a matter of putting my head down and doing reading...I did catch up, I passed my exams just as they did, so I kept proving to myself that I could do it, I passed all my exams, so far..." (C4/S25/L5<sup>0</sup>);</p> <p>"...yes it was a really tough year, I mean first year being away from home, and the fact you have so much work to do, but I found almost the work helped because, it was a distraction, I mean I do get homesick...first year was definitely a big learning curve..." (C4/S45/L1<sup>0</sup>).</p>	<p>"...it was just time management, because we had 3 modules going at once, which all had kind of different demands...and...we had had practical exams, this was the first time some of us had had practical exams which was in January and that was a new experience for me. but at the same time I quite enjoy practical exams...it was nice for me, I guess that was quite a struggle for some people though, because there are those who are shyer than others...I would probably class myself as one of the shy ones in the year, but it comes with the territory...it's a practical job, so its practice, and there is no point, deluding yourself that you are not going to have to do it because that's what your jobs going to be..." (C4/S39/L1<sup>0</sup>);</p> <p>"...first year was just what I had to do...I've grown up so much from it, its taught me so much...when it comes to exams it's good to have stress, because I find that is a motivator. I'm one of those people that does cram and it works for me because, that's how I get my brain to take things in, that's just my method of learning; but what I want to change is not having to resort to that, being more sensible with my time, but time is one of those things that is always a struggle to get to know, [pause] and get your kind of grasp around it, because its full of distractions for students..." (C4/S51/L1<sup>0</sup>);</p>
<p><b>Case 5</b></p>	<p>"I enjoyed the gym and doing sports...having the gym across the road, that's probably one of my best ways of relieving stress, it really worked for me...you can't deny the nightlife is great, that's another way, you just forget everything that's going on when you go out, you're out with friends...you get into a routine as well, like it was quite difficult with physiotherapy, because each week, the lectures and the practical's aren't at the same time...so you don't get a routine, but in a sense you do, because, your normally everyday going to university, you come home, you do your work, you either go to the gym, I had a routine going on, and I think that's what made me feel this is my home..." (C5/S20/L1<sup>0</sup>);</p>	<p>"...I had a couple of months where I'd made my friends, I'd fended for myself, and going back home was, your back to being a young child again, "where are you going?"; "what time are you coming home?"; whereas, I'm in the UK this is now my home, now I've got my house, I have my bedroom, I know I've got my bedroom back in [country named], but it's different, this is where I live now, hard to leave the sun, I've never had a winter, in England, so that was quite difficult, but you just get on with things, don't let anything stop you..." (C5/S12/L1*);</p> <p>"...I failed that MSK exam, I was just under prepared for it...I didn't realise how much there was to learn until it was too late, but, you get back on and you keep on going...I retook that exam and passed, but it jeopardised my neuro exam, cos I think you've got to think logically about these things...first years pass or fail, so...if I failed that MSK the second time...I had to...put the MSK before the others. It did mean that I failed the neuro, but I was able to retake that again...it's bad to say that I wasn't too worried about the</p>	<p>"...we had our MSK...module, before I went back [to placement], so you've got an understanding...you've done your moving and handling, you're a lot more...able to speak to patients, you've built up your confidence...I saw myself grow through those 4 weeks, as an individual, and as a learning physiotherapist...by the end of the second week, I had my own patients, I was doing interviews with them, I was...able to go and see patients because I'd build a rapport with them, and I think that's a key thing with physiotherapy, is to be able to communicate and build rapports with patients; and my confidence had grown dramatically...I had...5, 6 patients of my own, and it was great cos it really made you an independent student...I just saw myself grow from the first week to the fourth week and I think that was my greatest accomplishment, it was that second placement...I actually did quite well in that, that was probably my strongest, aspect..." (C5/S16/L4*);</p>

		mark, but, I passed first year and that's the main thing..." (C5/S22/L4 <sup>0</sup> );	
<b>Case 6</b>	<p>"...I passed my cardio exam and it was the best mark that I'd done for the year, I also passed my MSK [musculoskeletal] and my neuro but...I felt I could have done a bit better, I maybe could have found a better revision tactic...I found difficulty learning my muscles, just getting them into my head, there was a lot to learn, same with my neuro...I went and talked to one of my tutors and they helped me find different ways of revising so hopefully fingers crossed this year it will be different..." (C6/S4/L68<sup>0</sup>);</p> <p>"...my second placement, which was in the same place, was a positive thing because [I] got to see my educators again and they got to see how [I] had progressed...they gave me more trust, by the end of the 4 weeks I'd done a ward handover to my educator...she gave me the opportunity and I took it which I thought was good, cos I kind of showed that I could do stuff and, it made me feel a bit more confident as well..." (C6/S4/L73<sup>+</sup>);</p> <p>"... [Attending college pre-degree] was...in a weird way a good thing, because it...it helped my personality...interact with people I didn't really like...it made me...a bit more diplomatic. One of my flat mates, they just didn't mix, so I had to be a diplomat...it definitely had, an impact on how...tired I was, when I came into uni...it was really difficult to live with people that I didn't get on with, but...I don't think it had an impact on my performance because...I would sit in my room and do my work; it was more just getting sleep, she just ruined my sleep pattern...I would still go and do my work, and I wasn't really a big party animal, so I wasn't going to go out with her all the time..." (C6/S16/L1<sup>0</sup>);</p>	<p>"...following my placement though, I got a bit stressed about my exams because I was poorly, but then, because I'd done practice I felt a bit more prepared, cos, before our placement we'd done more practice to get ready for it, so when I came back after Christmas, even though I had been ill, I felt...a bit better, cos I'd practiced, I'd kind of given myself a bit of leeway in case something did happen...I passed my first exam and my studies skills assignment..." (C6/S4/L56<sup>0</sup>);</p> <p>"...I've learned that...if I want to do something I'll make it happen...throughout school...I wasn't a brain box...and I was told by a couple of teachers, that I wasn't smart enough to do physiotherapy, and that actually made me determined to do it. I just thought, you tell me I can't do it, then I'm definitely going to do it...if I want to do something, I will be able to...and that's what I've learned about myself...I'm quite a strong confident person..." (C6/S24/L1<sup>0</sup>);</p> <p>"...I don't think I would change it...even...going to college instead of coming straight to uni, I don't think I would change anything, because as much as I hated it, I hated living with the girl that I lived with, I didn't like being stressed about the exams, I didn't like being poorly, but everything's made me better...I'm pleased that they've all happened, cos it's probably made me stronger and made me more determined to do what I want to do..." (C6/S36/L2<sup>0</sup>);</p>	<p>"...passing those 2 exams made me feel confident and great about myself, but might make me a bit too cocky...I did revise at Christmas, but not a lot, not as much as I should have and I came out with a pretty good grade, so it probably did make me too cocky, so, me getting a knock back was what was needed..." (C6/S22/L14<sup>0</sup>);</p> <p>"...I think...when we had both cardio and neuro...exams quite close together, that was probably a negative for me, because, I found it difficult to work out, [laughing] my revision...before I knew it, it was gonna be my neuro exam, so, I... bunged too much into the short amount of time that we had, which was...a negative, but then...I passed my first year...I probably could have done a lot better if I had of...tried to, find a different way of organising my revision..." (C6/S30/L1<sup>0</sup>);</p>
<b>Case 7</b>	<p>"...my work at home I still don't think I've got that right, because I come home at different times and...I'm sorting food out, and washing and there's just not a strict regime there for me, but it's just something we cope with, I don't think it'll ever will be a strict regime with me, it's just me." (C7/S12/L28<sup>0</sup>);</p>	<p>"...I had a horrendous MSK [musculoskeletal] exam, that was due to a few different reasons, the main one was my own fault. I thought I could study using a computer and it was just so much to learn and I was panicky all the time, every day I woke up panicking "I should be revising" and either putting it off or doing it on the computer thinking I had it, and really...I wasn't learning it, I was trying to memorise it, you probably can do if your young..." (C7/S4/L79<sup>+</sup>);</p> <p>"[regarding the failed MSK exam] I didn't really do anything about it, I thought I could just get through it, get it done and...my priorities changed, that week, because my friend</p>	<p>"...I was disastrous in that exam, so I had to retake it, but over the summer I reflected and had a look at how I did revision; and I just did it differently and slowly and wrote everything out and pinned it up on walls and practiced over and over again, even though I was doing it by myself, I just found it a better way, and I remember everything from that exam now; so I learned a lot from being in that, it was an awful situation I was in, and it was upsetting, and when I came away I was gutted, but I think...if something doesn't work, or I'm not good at it, I will work hard, and try and fix it..." (C7/S4/L87<sup>0</sup>);</p>

		<p>who had died, I am very close to his wife and after the exam I drove to her house for a week, to look after her kids. I could have gone to the university and said "this has happened I'm really struggling". I didn't realise you could put a PEC [personal extenuating circumstances] form in. I thought, "no I'm better than that, I can do it", but obviously I didn't. When I spoke to my tutor, she was excellent with me, and advised to put a PECs form in... I don't know what it is with me, I thought, "no I don't have to put a PECs form in"; I would make sure I do it perfectly next time around, make sure I get a good mark. I just put that pressure on me, so I would get the work done and change it. I thought it was handled OK. I was upset after, straight after I had done it, my tutor...was angry [laughing] with me really, and I could see why. I just thought I can't do that again...I really messed up, but I had those problems, but also I ... I couldn't blame it on that, I felt like it was my own fault for not revising in the style that I knew, would work, but I think it was a learning thing as well." (C7/S14/L1<sup>0</sup>);</p>	<p>"...learning how to learn [has been positive]...we did a module on reflection...I've always done a lot of reflection in my own sport...when you were unsuccessful in a competition you would go back and look at a video analysis, look at opponents, and so I already had that understanding of how to do it, but it was motivating myself to do it in a different situation...it's a different type of pressure here...my old pressure was if you don't do this you...get flattened...whereas here...it is long...but definitely the reflection and...organising...my family life and also my judo life as well, because I still coach...cos I couldn't not do it..." (C7/S12/L1<sup>+</sup>);</p>
<b>Case 8</b>	<p>"...I've never been, great at revising; and still not really found a way of revising that works for me so, it's knowing that and working to the best of my ability with the revision, rather than just leaving it; I didn't leave it until the last minute..." (C8/S6/L23<sup>0</sup>);</p> <p>"...I'm quite happy the way that this year's structured. I think towards the end of year 1 I was kind of balancing my work and going out more...socialising more on a weekend rather than midweek, so I could do my work and have the weekend to myself as a bit of me time, a bit of down time off the course; which I think is vital, cos, obviously it is a tough course, and...all the tutors say is you've got to be prepared to work...do the hours out of uni; but, it still doesn't quite prepare you for how intense the course actually is..." (C8/S6/L31<sup>0</sup>);</p> <p>"...[placement] was interesting. It was good because I got on really well with my educators and I learned a lot, in terms of the respiratory conditions. We'd do a few in-service trainings, I had to do a presentation, well I didn't have to, she asked me to do one on the last day, about something, that I had learned on the placement, so I kind of chose one of the conditions that one of the guys had, which was arteriovenous malformation, it was something I had not heard of before, it was interesting doing the research around that..."</p>	<p>"...I enjoyed getting the responsibility out of that and then going through the interviews; obviously I was a bit nervous on the days, but it was good fun and it was a good learning curve, just being able to present myself, professionally, in a good light to various people..." (C8/S4/L34<sup>+</sup>);</p> <p>"...as much as people, at interviews and at Open Days were saying "it is a really tough course", you think... "it'll be fine, I'll still be able to do, it will be just like college, just a bit more work"; but it's not, it's a lot more, a lot more intense, but, I did find a way to strike a balance..." (C8/S6/L37<sup>0</sup>);</p> <p>"...semester 2 was a bit stressful, just, cos the musculoskeletal exam you have a lot to learn, the neuro exam you have a lot to learn. I've learned now, to balance my time a bit better..." (C8/S16/L1<sup>0</sup>);</p>	<p>"...the first exam, I didn't treat it as seriously as I should have done, I didn't put enough work in for it, and that gave me a kick up the backside to do well, for the rest of the year, and, through on this year..." (C8/S12/L9<sup>0</sup>);</p> <p>"...it came to the exams in January...I hadn't gone out as much as my flatmates, but I hadn't quite estimated how taxing the exams were going to be and didn't quite do as well as I wanted in my first year. I passed it just about, but I didn't get anywhere near the grade that I wanted; and that kind of gave me the kick up the backside that I needed to knuckle down even further, and put the hours in; and I think that showed in my exams later on in the year where I got much higher grades...so it...made me aware of how much work you actually had to put in, out of uni, not just going to the lectures, but actually sitting and doing the reading, typing up your notes, and doing directed study and revising and starting revision early..." (C8/S6/L16<sup>0</sup>);</p>

	(C8/S10/L14*);		
<b>Case 9</b>	<p>"...the first semester generally went ok. What I tried to do was come in at 9 and leave at 4, whether I had 2 hours lectures or 5 hours' lectures, cos I don't get a lot of work done at home when I'm there..." (C9/S18/L3<sup>0</sup>);</p> <p>"...semester 2 was a bit 'higgledy piggledy' for me cos my dad wasn't very well and then he died at Easter. I found out that he wasn't going to get better at the end of February, so, I saw [named guidance tutor] straight away...so that was good to talk...that was before the MSK [musculoskeletal] exam started...they were supportive and I knew I would have to take time off, as he got worse, so that upset things as far as coming in, I missed quite a few lectures and quite a few practicals...I was still able to do quite a lot of the theory..." (C9/S20/L1<sup>0</sup>);</p>	<p>"...I looked into what I needed to get onto the course, so I knew I needed to do another HEFC which was in human biology, because the ones I'd done previously were sociology, social welfare and English. So I went back to work...and did the HEFC part-time..." (C9/S4/L21<sup>0</sup>);</p> <p>"...the neuro, I'd been to most of the lectures and so with that being a written exam I was able to revise for that in my own time. The cardio, I had a few one-on-one sessions with [named staff], where he went through things that I'd missed, cos that was more skill based. I missed a lot of the round-robin things where you could try a few different stations; so I didn't go into the exam blind, but not as prepared as if I had been at all the practical's and if I had been doing a bit of practicing, but, that was good to know the option for, one-on-one chats, or one-on-one skills practices was available and that helped; but as far as the workload and the ability to cope with the workload, I think I still managed..." (C9/S22/L1<sup>0</sup>);</p>	<p>"...we had an essay at the start and I did really well... physio skills I didn't practice enough; theory I was good, but I think I didn't do enough practice outside of the time; I was still more than adequately prepared, but if I wanted to push myself up to the next grade, I just could have done a bit more repetition of the actual skills themselves..." (C9/S16/L1<sup>0</sup>);</p> <p>"...I think everything went well, but I was aware of myself [during the practical exams] having to really think and really concentrate on what I was doing and what I was saying; so it was useful..." (C9/S18/L1*);</p> <p>"... [reflecting on year 1] I didn't really have any main expectations to be honest; I am not one of these people who over think what's coming ahead. So, it was appropriate, it gave me a good grounding which was explained to start with, that year 1 [would] get everybody to the same standard of knowledge. I suppose I thought I might have a bit less all-round biological/anatomical knowledge than some of the people doing it for A' levels and coming straight from school. So it was set up well as far as progression..." (C9/S26/L1*)</p>
<b>Participants</b>	<b>4. Caring/Altruism</b>	<b>5. Interpersonal relationships</b>	<b>6. Attitude to learning</b>
<b>Case 1</b>		<p>"...neuro was quite hard but there was a lot of encouragement from [members of staff named] and within the group, everyone helped each other as much as they could to revise..." (C1/S24/L7*);</p> <p>"The end of year 1 was really good, cos the educator was really encouraging, she did happily criticise you, but did it in a very positive way, if you did something that wasn't great she would give you something to improve on; in the same way, you would respect, if she was to praise you, it would have more effect, coz she wasn't just being overly nice..." (C1/S30/L1*);</p> <p>"... [best part of semester 1] was the dynamics of everyone pulling together, although we hadn't necessarily known each other very long." (C1/S32/L1*);</p>	<p>"... [the poor anatomy result] was more like a push to highlight the areas of weakness, learning stuff to just remember is not my strongest point, there has to be, more behind it, like say, the treatment stuff we are doing at the minute, but in terms of therapeutic skills, because it was more practical, I felt I kind of got that down a little bit better..." (C1/S16/L3<sup>0</sup>);</p> <p>"...I personally would feel a bit more comfortable with more practice essays, more [formative], I guess you wouldn't be able to have it marked so, yeah, the practice essays, just so you could kind of know you're on the right lines in essay writing structure." (C1/S44/L7<sup>0</sup>)</p>
<b>Case 2</b>	<p>"...the satisfaction I get from people hobbling into my house where I practice and walking without pain or with less pain is a tremendous feeling, you know, and that's why I do it, you know, there is no other factor involved I do get, I do see, I do like seeing people with less pain, and that's it..." (C2/S3/L10*)</p>	<p>"...I'm quite amazed that a lot of them are so young, they are so mature in their ways of thinking and they not prejudiced in any way towards me, which is great, they accept me for who I am, because I am a mature student, I'm the same age as their parents [laugh] in their 50's and I'm just past 50 so it's weird, it's not natural; and I don't socialise with the class and</p>	<p>"...the first time I went to university to do [named subject], after the first six months I was quite confident, I was always in the top tier of the class and I felt really confident and knew exactly what I was doing; but this degree, the science is totally different to what I've done in the past, even though that gap at [College named] was helpful, still...a huge gap it felt."</p>

		<p>that's nothing to do with them it's just that I've got the tee-shirt for it..." (C2/S41/L6<sup>0</sup>).</p> <p>"...if I was more upfront with the lecturers and more outspoken, I was keeping it to myself because I'm used to getting things done myself, I'm pretty independent. if I'm struggling I put a bit more work in to it and I overcome it; but obviously that wasn't happening; and, because I was practicing all the time, I was coming in every weekend to practice, I wasn't staying perhaps as long as other people, but I was in every day practicing and perhaps [long pause] I know it sounds funny, but perhaps I was too confident that I would get a pass and really I wasn't good enough to get a pass and that was the truth of the matter." (C2/29/L1<sup>0</sup>)</p>	<p>(C2/S9/L7<sup>+</sup>);</p> <p>"I'm not sure whether it's an age factor or I didn't know my stuff...you see different standards of the people on your cohort and I started to doubt myself a lot...I want to be a decent physio so that was a bit worrying and... it's taken me a while to try and adapt to it." (C2/S27/L1<sup>0</sup>)</p>
<b>Case 3</b>	<p>"...working with a client in the hydro pool, obviously she [client] had been working with people for months, but I got her standing unsupported for the first time, and bringing her back to her bed and her parents were there, and it was like "oh my god I stood up"...just seeing that side of it, it was just, there was...a couple of overwhelmingly positive experiences, and really, reaffirming..." (C3/S114/L11<sup>+</sup>);</p>	<p>"...I had 2 really good placements and I got really good feedback...I was lucky enough to go to the same placement twice, but it was really reaffirming...this is right for you, you are actually good at this, at the level you are, you are good at that..." (C3/S78/L12<sup>+</sup>).</p> <p>"the final [year 1] placement...neuro sciences...my clinical educator was just fantastic, obviously massively versed in the neurosurgical rehab and brain and spinal cord injuries; and I just learned so much and...there were pennies dropping all over the place...it just tied everything together really well..." (C3/S108/L1<sup>+</sup>);</p> <p>"...I learned so much, and then it was funny...I was seeing stuff that was what she was doing, it was different to what we're doing but it was still the same theories, and hearing the commands and... what she was doing and...I am learning from it even though it was a couple of months ago, I am still applying things I am learning now that I didn't even bring to the placement, but it makes past experience more relevant..." (C3/S112/L5<sup>+</sup>);</p>	<p>"...with regards to my education, I wasn't going to half do it...I said "I'm attending every lecture and I'm reading", and he [a friend] said, "you didn't, give up your job, do all that voluntary stuff last year, finish your relationship, and leave your family, you didn't do that and not go to class." (C3/S48/L3<sup>+</sup>);</p> <p>"...the physiotherapy course is incredibly difficult, it's a massive challenge, but I think, if you are willing to engage in the challenge...based on my previous degree, I have never, I didn't work like this..." (C3/S50/L6<sup>0</sup>).</p> <p>"...I don't get stressed about exams, because I failed so many exams in my life and I am still going. If anything is going to make you nervous is fear of failure and if you have already failed things in the past, you bounce back from it, you know if you fail you just resit it and pass it..." (C3/S62/L9<sup>+</sup>);</p>
<b>Case 4</b>		<p>"...they [clinical educators] encouraged me so much and they let me do some things with their guidance, so it gave me confidence, I can do this. It's a big learning curve, but it doesn't mean that I don't have the ability to cope with that." (C4/S23/L9<sup>+</sup>);</p>	<p>"...I'd rather have variety than not...if all my exams had been papers it would have probably brought me down...I like practical exams because I can go in, I can say what I want to get across, whereas in papers and assignments it can...get lost, in the...stress of getting so many words...but...we did have an assignment and we did have a written paper exam, and that was also nice to break it up...and nerves come in practical exams...sometimes you get flustered, whereas papers you can sit down, you don't have the nerve factor, and, I like the variety...it is what I expected." (C4/S41/L1<sup>+</sup>);</p>

<p><b>Case 5</b></p>	<p>“...I have to be helping people...that...influenced me in the way of physiotherapy, but before I chose physiotherapy...I carried out a placement [pause] in music therapy actually to start with disabled children, just to see the challenges...working with less able people; and I absolutely loved it and the satisfaction was unbelievable (C5/S4/L16+);</p> <p>“...I did struggle through the first couple of months, I loved it, absolutely loved it, but when I did that placement, it was just like, yeah, this is exactly what I want to do, and I had it on orthopaedics, in the [named hospital], and just being able to help patients, and...they won't probably get back to exactly how they were before the operation, but they'll still be able to do...everyday living things, and have a good way of life, and it was just great to see patients coming in and leaving, and knowing that you've helped them, it was, it was a really nice placement to start off on (C5/S8/L37<sup>0</sup>);</p>	<p>“...we had our MSK...module, before I went back [to placement], so you've got an understanding...you've done your moving and handling, you're a lot more...able to speak to patients, you've built up your confidence...I saw myself grow through those 4 weeks, as an individual, and as a learning physiotherapist...by the end of the second week, I had my own patients, I was doing interviews with them, I was...able to go and see patients because I'd build a rapport with them, and I think that's a key thing with physiotherapy, is to be able to communicate and build rapports with patients; and my confidence had grown dramatically...I had...5, 6 patients of my own, and it was great cos it really made you an independent student...I just saw myself grow from the first week to the fourth week and I think that was my greatest accomplishment, it was that second placement...I actually did quite well in that, that was probably my strongest, aspect...” (C5/S16/L4*);</p> <p>“I think it was probably being away from home...that was...probably one of the biggest challenges that I've ever had to face...I made some great friends...and everyone's there to lean on, and if you need an adult's point of view, you've got your lecturers there, and, physiotherapy's a sophisticated course, there's quite a lot of older students, and it makes you grow up...” (C5/S18/L1<sup>0</sup>).</p>	<p>“...with physio, another reason why I picked it is coz it's not all lectures, you're not always sat in a lecture hall, there's practical's...I don't really like to be sat down all the time, so it was perfect, and you're getting hands on...” (C5/S16/L21*);</p>
<p><b>Case 6</b></p>	<p>“...I just like to see people smile, I've noticed that on placement as well, people that I've talked to and seen that they have had a really rubbish time, and just to walk them to the end of the corridor, and them say thank you, it just made me feel so warm [laugh] it sounds so silly...” (C6/S10/L2*);</p>	<p>“[Became ill] straight after my first placement...I was off for 5 weeks instead of 2...that was a big chunk of when I could have been revising, but, then...my friendship group...were sending me notes over Christmas, I'd say “please will you send me something”, and they'd send me it, then after Christmas...I had missed 2 scenarios...my friendship group helped me learn them because they'd done it and they are really quite good [laughing] at teaching, they taught me how to do it...” (C6/S26/L1<sup>0</sup>).</p>	<p>“...[to improve learning] asking for help, rather than just thinking, “I'm bothering someone”...I realise that you all want us to pass so...going to ask for help is not a bad thing, and like working with my friendship group more, that's probably why we're in a lot more now, because, sitting at home, if you don't get something you can't...ask someone...so practicing a lot more and doing things out loud, that was a positive from talking to my tutor, practicing how things would be in the exam, rather than just writing things down...” (C6/S32/L1<sup>0</sup>);</p>
<p><b>Case 7</b></p>		<p>“...I found it hard to get into a study group with other people and I don't know whether that's just because...I just don't have anything in common with anybody...” (C7/S4/L76*).</p> <p>“...when I first came in I was shocked with the young students that I couldn't related to them, at all, my daughter's just finished her degree, em, [pause] and I found them so much younger than her...but I would never suggest ageism, I have friends who are younger...initially I found it difficult, just being an older student and having nothing in common with anybody...” (C7/S8/L1<sup>0</sup>).</p>	<p>“...I really enjoy it; I feel I'm getting a gift that somebody has given me something to learn now that I would never have had the opportunity to do...” (C7/S4/L92*);</p>



		<p>"...I did palliative care...I didn't have a positive experience with the Band 7...she was just rude [laugh] and really questioned why I was there, why I was doing a physio degree at my age; so we started off on a bad footing really; luckily there was another physio who I did most of my work experience with, who was wonderful...and all the other staff there, so I got a great opportunity to work with the OTs and assistants and nurses as well, and even though I was terribly upset at first...it was a fantastic placement and I was gutted when I left, I just felt that I was part of the staff, so that was really good" (C7/S4/L67<sup>0</sup>).</p>	
<b>Case 8</b>	<p>"...I was volunteering at a middle school in the PE department on a Wednesday afternoon for 2 years, and I was really enjoying that, just helping out. I was mainly working with the more challenged people in the class, to reduce the burden on the teacher...and I could help, people...and make sure they were fitting in and getting some form of P.E. even if it wasn't doing the highest level skills...it was just general, making sure that they actually enjoyed P.E. I got quite a good response from the kids, who were saying, "oh we're really enjoying it this year, we've not really done much P.E. before, cos we don't fit in with the sporty kids, or we don't enjoy it, or we're not fit enough" ...it's nice to get some positive recognition from kids, that I had helped..." (C8/S4/L37<sup>+</sup>);</p>	<p>"...they [flatmates] do sports courses, quite similar in nature and some of the anatomy stuff and so we share work and help each other out if possible, but they just have less work than me..." (C8/S6/L56<sup>0</sup>).</p>	<p>"...obviously the degree is, first and foremost, what I'm here for so that's got to take priority; but it is important to get some socialising done and not become a recluse or something like that..." (C8/S6/L42<sup>0</sup>);</p>
<b>Case 9</b>	<p>"...it was more doing something worthwhile really, that's what I sort of felt as the main emphasis for going into a caring, medical sort of direction..." (C9/S6/L1<sup>0</sup>);</p>	<p>"... [due to relatives illness and death a number of practical session had been missed] I had a few one on one session with [named staff], where he went through things that I'd missed... and so I didn't go into the exam blind, not as prepared as if I had been at all the practical's, but that was good, the option for one on one chats or one on one skills practices was, was available..." (C9/S22/L2<sup>+</sup>).</p>	<p>"... [Success comes from] actually following through what you want to do...just keep plugging away. I've done alright but I think it's just putting in book studying; but a lot of that was probably rote learning because of the circumstances last year, so maybe not as much in depth as would have been ideal; but spending time actually in university, whether it's in the library or in timetabled sessions..." (C9/S28/L1<sup>0</sup>)</p>
<b>Participants</b>	<b>7. Attraction to Physiotherapy Identity</b>		
<b>Case 1</b>	<p>"...there was family experience of hospital physio, mainly...my granddad and not necessarily him getting particularly a lot of physio, but seeing people in his ward getting up and about, you see it help them, it helped him a little bit as well, to maintain independence..." (C1/S4/L4<sup>+</sup>)</p> <p>"...it was motivating in that I knew I wanted to be a physio..." (C1/S6/L8<sup>+</sup>)</p>		
<b>Case 2</b>	<p>"...I started about 8 or 9 years ago when I took my wife to a physiotherapist, she had a sore back, her family have a history of sore backs; and this local physio, he couldn't tell us what was wrong with my wife, but he said she had to come for treatment for 18 months; and I just could not comprehend that and so, with that mind I enrolled in a sports massage injury course at [named] College and I thought that I could perhaps maintain her condition, because I wanted to find the cause of the problem, and that's what started me into it..." (C2/S3/L1<sup>0</sup>)</p> <p>"...I was fixing people but I didn't know how the fix was made and that's why I'm here to understand how the fix is made and be a bit more aware of the human body...it is of interest..." (C2/S5/L1<sup>0</sup>);</p> <p>"...the business has slid down a bit and I intentionally did want it to slide down anyway as I wanted to focus all my efforts on my physiotherapy." (C2/S7/L5<sup>+</sup>)</p>		

	<p>"...my engineering business, the customers that are left I know pretty well, so I can manage that...I can get away with getting it the next day or 2 days later, so that was a great thing for me so I could concentrate on my studies..." (C2/S9/L3+);</p> <p>"...I enjoy meeting people and I enjoy, looking at different aspects of the human body and I've got an affair with, I've got a huge passion for healing within the body..." (C2/S11/L3+);</p>
<b>Case 3</b>	<p>"...from a mature student perspective my idea behind physiotherapy was an interest that I had when I was probably 17, 18, a long way back, but at the time I suppose maturity and other factors put me into a different college path so I did a 4-year degree in maths and physics and I ended up going travelling for about 8 years, so I was fairly distracted, having fun; and when I came back, when I was turning 29, 30 I thought I would give it a go..." (C3/S4/L1+);</p> <p>"...I was persuaded by someone to give it another go next year, and got started on getting placements earlier. I was working in a pub at the time and it turned out that one of the patrons was a muscular physio and it's like everything else in life it's not what you know, but who you know..." (C3/S6/L5+);</p> <p>"...he [physiotherapist] was like "what do you think", I said "really interesting", so he said, "look one of my colleagues, she works in community do you want to have a look with her?" I said "yea" and went with her and did 2 afternoons with her and she was like, "oh what do you think, well I know someone in the university hospital if you want you can go and have a look at respiratory", so I kind of got past between a couple of physiotherapists and that was great cos that was really like "this is what I want to do..." (C3/S10/L2+);</p> <p>"...my mother was very badly afflicted with back pain, really brutally debilitated back pain; and still is to a point; and I am learning more and more about what is wrong with my mother from the course. I always saw the debilitating effects of pain and muscular skeletal pain, and then consequently because she did get quite a lot of relief and was so much better than she was, but I think seeing the effect of physiotherapy, and she tried everything, as one does over 8 years of chronic pain, she ended up retiring because of it, so I saw the effects of pain and the positive effects of decent treatment..." (C3/S12/L4+);</p> <p>"...it was really good and from a personal perspective I saw good physiotherapy and the positive effects of a very good, very motivational physiotherapist, and I have learnt a lot from it, which I will bring into my own practice definitely...(C3/S16/L2+);</p> <p>"...it was a great thing to be given this for my career; something that you are really interested in, something that you think you will be good at..." (C3/S40/L11+);</p> <p>"...I had a good job at the time, I had just got back to work after my injury, leaving home, on top of that I was in a 6-year relationship which ended because I was leaving and she did not want to come with me; so I could stay or I can leave, but it was the right thing to do, so I think I gave up quite a lot to leave; so that was quite a negative experience, a sacrifice..." (C3/S42/L9+);</p> <p>"...[placement] was really reaffirming, like, this is right for you, you are actually good at this, at the level you are, you are good at that..." (C3/S78/L13+)</p> <p>"...I want to be good at this...I couldn't imagine being bad at this as a job, to me it is almost irresponsible to be bad at it. I remember talking to a mate at Christmas, he is a teacher, and he said to me, "it's like, you know I have lessons and I come out of the lesson and I think "god that could have gone better"; and he said "but if you come out of a session and that could have gone better...someone's in pain or somebody still can't walk...that's awful"...you know, it was "Jesus, thanks for that, I could do with that extra guilt", but that's the thing...I can actually say that I want to do this, but I want to be good at it, I just don't want to do it..." (C3/S88/L1+);</p> <p>"...I would like to be good at this, and...I suppose it's possible to qualify and still not be good at it...if you're academically smart, maybe you can turn it on for exams, but, maybe your motivation for doing is different, or maybe seeing my mother with pain and stuff like that, that's a motivation to want to be good at it, because you see the difference that it makes, receiving physiotherapy myself after my accident..." (C3/S92/L1+);</p> <p>"I got a really good positive feedback from that [placement] and I was given a degree of responsibility, that a lot of the members of the team were saying..."that's really good, they like you, you are doing really well and that's a big thing that...you are allowed to lead on the rehab with a patient"...granted, it was not a particularly high level patient..."but you're still doing it by yourself, and you are, writing the notes yourself, you are doing everything yourself, you are effective"... eventually, "do you think we could discharge them?" And I was, "well I think so?" And it was "well you can't think, and you have to back yourself up" ... given what I know, and what I have done, yes." And doing that and being allowed to tell someone, from our perspective you're great, you're perfect, you're good to go...that was really good, there were so many positive experiences..." (C3/S114/L1+);</p>
<b>Case 4</b>	<p>"...I went in with my brother into his physio session and just thought it was quite cool and afterwards it just stuck in my head (C4/S5/L5+);</p>

	<p>"...volunteering was good for me to get into the mind space of, this is what it will be like if I worked in a hospital someday, I was lucky enough to talk to some physios whilst I was there, and they were nice enough to bring me around whilst they were on their rounds and it, just further cemented the idea in my head, that this could be what I want to do one day." (C4/S11/L6*);</p> <p>"...because physio was my kind of high goal, and I had back up plans but, applying for university was scary, interview processes were scary..." (C4/S13/L1*);</p> <p>"...my first placement was in ICU and critical care, and I actually loved it...I hadn't even thought that a physio could do that kind of work...the physios in hospitals are so lovely, they just encouraged me so much and let me do some things with their guidance, so it gave me confidence...yeah it's a big learning curve, but it doesn't mean that I don't have the ability to cope with that." (C4/S23/L5*);</p> <p>"...I felt that [placement] kind of lit the flame and kept the interest going..." (C4/S27/L2*);</p> <p>"...we don't really have the full student experience, but that's what we signed up for. A healthcare job isn't easy, it's just a matter of...prioritising what you want short term compared to long term." (C4/S29/L1<sup>0</sup>).</p> <p>"...it's a practical job, so its practice, and there is no point, deluding yourself that you are not going to have to do it because that's what your jobs going to be..." (C4/S39/L6*);</p> <p>"...over the summer [placement] made me want to come back [laugh] ..." (C4/S43/L9*);</p> <p>"...after placement it was such a good month and I really enjoyed it; it just comes down to the fact that I was seeing what I would be doing later in life and I enjoyed it, so that told me that I was on the right tracks." (C4/S45/L6*)</p>
<b>Case 5</b>	<p>"...physiotherapy is really [pause] not sporty but it's a practical job; it's not sat behind a desk and that's the one thing that I didn't want, I don't think I could have coped with sitting behind a desk all day. I have to be up, I have to be helping people, I have to be doing something, so that kind of influenced me in the way of physiotherapy..." (C5/S4/L14*);</p> <p>"...I looked at osteopathy, but, again the same thing as the sports therapy, it wasn't as general as physio, so, hence why I went down the physio aspect of things (C5/S4/32*);</p> <p>"...I came to do physiotherapy because I loved sports, and I was like, right I am going to come out of physio and I'm going to go straight into sports, but, being on the course its changed my perspective completely. We've learned so much, I think when people come onto the course they're very narrow minded, and "I want to do this, I want to come out and I'm going to go straight into this", but it's really changed my perspective, looking at neuro, cardio-respiratory, musculoskeletal, I'm interested in doing anything now, I really want to keep my options open, I don't want to have that narrow mind (C5/S8/L25*)</p> <p>"...I really enjoyed the first placement...the course is difficult...very intense, there's a lot you've got to learn, especially in the first couple of months, so, it was a struggle ...and it does make you question your choices and your decision to do the course; but then when you do that placement its great because it clarifies this is what you want to do, you've picked the right course, this is exactly it, and that's what I needed..." (C5/S8/L32<sup>0</sup>).</p>
<b>Case 6</b>	<p>"...what started off my interest in physiotherapy? This is kind of a positive and a negative thing, it was going to a physio class with my mum, cos she' got multiple sclerosis, so that when I was about 8 I started going on my school holidays so it was a good thing because that sparked off my interest in wanting to do it, but it was a bad thing because it was a shock...but it helped me because I still go now, so I get to see how other people's MS works..." (C6/S4/L1<sup>0</sup>);</p> <p>"...I had to get physio for injuries, so I got a bit of both sport and more clinical [experience], I also, got to go and have work experience in local hospitals which pushed me to think that I really wanted to it; and with my mum's physios; obviously it was just observation but it pushed me that I really wanted to do it..." (C6/S4/L6*);</p> <p>"...I applied for physio and I got an offer, which was amazing...this is really what I want to do, but then I didn't have the grades...so it was the worst day of my life, it was like everything's over, "I'm not going to get to do physio, what am I going to do?" I spent all day in clearing trying to get in and it wasn't a nice experience at all...I decided to pick myself up and I went to a college open day...I decided to go do a health and social care diploma, I did that for 2 years at college..." (C6/S4/L20<sup>0</sup>).</p> <p>"...my mum's physio class, I've seen how happy it can make them, even if it's just going to see people, socialising; and how its maintained their level, rather than, if they hadn't have gone to that class then their mobility and function would may be drop a lot quicker, and it's kept them on the straight and narrow..." (C6/S8/L2*);</p>

	<p>"...[placements] definitely cement that this is what I wanted to do...because of how good the people were I got to work with...it was really good for a lot of different reasons...building myself, personality, skills, learning more, asking for help...just asking questions that was a positive...and then my feedback...I couldn't really have asked for anything better...she [clinical educator] just made me realise this is what I want to do...for someone to watch me that long and then give me the feedback that I got and, give me tips and say..."we're really pleased and happy how well you've done" it was really, really good." (C6/S34/L1*).</p>
<b>Case 7</b>	<p>"...I was involved in a sport and went through to an international level so, I always had my own physio and I think, my most positive role with that one was I saw him at a young age...I used to go and see him quite a lot, that was a really positive experience..." (C7/S4/L2*);</p> <p>"...I had a baby at quite a young age and I had a problem with my abdominal muscles splitting and I worked with a physio and they were just positive meetings with physiotherapists..." (C7/S4/L6<sup>0</sup>);</p> <p>"...after my little one, she [had] just gone up to university, and it was a shock, to think, I need to do something now for me, so I went back to do an access course, still unsure...I had physiotherapy in the back of my mind, had all these people on pedestals, so I thought it was out of my limits to do it, but I wanted to go into a caring profession..." (C7/S4/L13<sup>0</sup>);</p> <p>"...in the physiotherapy [open day] lecture and [I] had a look around, I just got quite excited thinking I could do this..." (C7/S4/L19*);</p> <p>"...while I was working I was doing night classes and I did quite well in them; so I got the marks I needed and I just thought, go for what you want go for and if it doesn't work out well it's not meant to be; and I think it was probably my last chance, cos I was hitting my late 30s, and [laugh] I have a little one as well who is 11, whose quite independent, and I thought well, he's at an age now where I could probably manage doing something, a bit more full time and give it a go, so I applied that was my journey to applying" (C7S4/L20<sup>0</sup>);</p> <p>"...I thought doing physiotherapy I could, it is quite diverse and you can get jobs in different areas..." (C7/S4/37*);</p> <p>"...I think it's the right way forward for me, I'm always questioning everything I am doing and I always question "am I doing the right thing, is this what I really wanted to do, do I really know what I want to do?" I think doing year 1 and getting into year 2 has capped it and said "yes this is what you are doing, you've managed to get through year 1, this is the path now you're gonna take"" (C7/S16/L1*);</p> <p>"...I just want to feel like I'm coming here to do a job, to get my qualification and then move on..." (C7/S18/L4*)</p>
<b>Case 8</b>	<p>"...I didn't have the goal of physio in mind. Initially I chose my A levels based on wanting to do teaching..." (C8/S4/L1*);</p> <p>"...I had physio for sports injury...and thought actually this could be quite interesting, it combines the anatomy that I like, but can be sporty, it can be other settings..." (C8/S4/L6*);</p> <p>"...luckily my auntie's best friend is an amputee physio at the local hospital, so I was able to shadow a few physios, a few different areas, like musculo-skeletal and amputee, and a bit of respiratory while I was there, so I had a little bit of a grounding in some areas of physio, obviously there's a lot more than what I got..." (C8/S4/L11*)</p> <p>"...it gave me a bit of insight into what it was, and I thought maybe this could be for me, so I started applying, to various different unis..." (C8/S4/L18*);</p> <p>"...I was invited to do things, do a few assessments and just help with mobility and things like that. I have chosen quite well and like what I'm doing, I've chosen well..." (C8/S6/L14*);</p> <p>"...I'm really enjoying uni life...couldn't wait to come back in September..." (C8/S6/L59*);</p> <p>"...I was really looking forward to coming back up, I really enjoy being up here, and I was excited to start back, knowing that, it was going to be more challenging and there was going to be different modules and more treatment focused, so it would actually feel more like physio..." (C8/S6/L68*)</p>
<b>Case 9</b>	<p>"...I was looking to do something where I would get more out of it, so I looked into a few different things so I could get a trade, plumbing, plastering that sort of thing. I decided on social work, so I left my job to do some A level equivalent...I did three a year. During that year, I thought about physiotherapy but, I think I was put off a little bit by the competitive nature of getting on the course, the high grades and the high expectations to actually get onto it..." (C9/S4/L9<sup>0</sup>);</p>

"I made my decision to change, but it meant a little bit longer studying. I got 5 days' work experience in the physio department which pretty much made my mind up that I wanted to go for physio; and I did quite well at the things I was studying at college, so that gave me a positive boost to think that I might be able to meet the criteria to get on the course..." (C9/S4/L16\*);

"...my resolve to do physio, I did a taster course which was useful and gave me a bit more idea of what the actual course would entail, as opposed to just the profession, so that was a big plus..." (C9/S4/L24\*);

"...I went to 3 open days...the information I got was positive in giving me the idea that I would be able to get on the course and the strengths you need, and giving me information about what to expect..." (C9/S4/L26\*);

"...one of the reasons I looked at social work, [and] at physiotherapy as well, and even things like having a trade, it's something you can take everywhere, it's not dependent on the country you're in, or the language you speak, so that was a big extra reason..." (C9/S4/L30\*);

"...I got 3 days at [named hospital] and a couple of days at [named hospital], so they were all pluses to put on the form, but they were all extra positives to know that I was doing' the right thing..." (C9/S8/L9\*);

"...I think the one [placement] in November came at the right time as well because it just gives you an extra impetus as to why you are doing things, and so good, productive chats with mentors and educators, I think it was set up quite well..." (C9/S24/L2\*);

"I still have doubts, I had plenty of doubts when I was making the decision to change career and do something different and again I still wonder if I've done the right thing..." (C9/S32/L1<sup>0</sup>);

"...I don't regret it but, we could have managed just as well with me sort of being the main child carer and maybe doing a couple of days' work. I'm definitely glad that, I'm definitely positive about keeping going, but I think that, if we'd done things differently it still might have worked out ok; but as far as the decision to do it, I'm still happy I've done the right thing, definitely, but yeah, there's still doubts about what we'll do when I qualify and how we'll work things out..." (C9/S32/L4\*);

"... [I am] definitely more than happy I've done this, and probably at this time of life as well, because I think if I'd wanted to do it at 18, 19 I wouldn't have been able to. I am not the same sort of people as what's on the course now, you know at that age; I would say as far as the selection of physio as a career, I can't see myself wanting to do anything else..." (C9/S34/L1\*);

## APPENDIX 10: PHASE 2 INTERVIEW DATA MATRIX EXAMPLES OF THE EMERGENT PERSONAL CHARACTERISTICS.

Participants	1 Conscientiousness	2 Resilience	3 Reflection
<b>Case 1</b>	<p>"Semester 2, was a lot of written work it was all sort of assignment based and referencing wasn't awesome, I'm not great at that as I have discovered, it was highlighted to time management..." (C1/S20/L1)</p> <p>"...I was a lot happier to get the work done cos, I have done all that [socialising], so I [wanted to] get a degree and it was hard enough anyway." (C1/S28/L6<sup>0</sup>);</p>	<p>"...I guess because we've had family health issues before there's a stoic...attitude of just getting on with it, cos it's not really going to help anyone stressing about it and definitely not going to help me stressing about it..." (C1/S75/L1<sup>0</sup>);</p> <p>"...the way I respond to...stresses of...potentially losing people or...I guess a placement...when you understand it's not so bad, it's not so stressful, it's one of those things...we all end up dead...obviously it's sad when people go...but I stress more about not being prepared and disappointing my educators and myself in not knowing things; so the unknown is my biggest stressor---so in the middle of year 2 when...I had to step off the course--- the health issues, there were a lot of unknown...so...I deal with it and get through things by understanding...what's going on---whereas...you know someone's dying...it's quite sad...but you have to be the supporting role..." (C1/S77/L1<sup>0</sup>);</p>	<p>"I had to re-sit an exam and that was quite an anxious thing, but in a positive spin I didn't want to experience that sort of anxiety again so it pushed me into more preparation in other exams and assignments" (C1/S53/L2<sup>0</sup>).</p> <p>[Responding to a question about feedback from the failed practical exam] "...looking back at the feedback...it wasn't actually that scary, it's just what you have to do as a physio...so that's settled my nerves when it came to the resit, but also it gave me the opportunity to...understand...my interventions and approach and evidence towards the sort of situation". (C1/S59/L7<sup>+</sup>);</p> <p>"it's ok to now know stuff as long as you know what you don't know...identify weaknesses. Even the most senior physio doesn't necessarily know everything and it is that continuous learning [did not finish sentence] ". (C1/S59/L19<sup>+</sup>);</p> <p>"...in every...aspect of physio, respiratory, neuro, etc. they all have a bit of a crossover". (C1/S61/L3<sup>+</sup>);</p> <p>[Earlier in the year] "I picked up one of the Bobath books and...it was totally overwhelming and I didn't really understand what it was going on about, and then having a few neuro placements...I then got the same book out ready for...placements towards the end of year 2, it made a lot more sense because we'd talked about movement facilitation and things in other placements". (C1/S61/L7<sup>+</sup>)</p>
<b>Case 2</b>	<p>"...the people within the cohort are tremendous, they seem to be a better quality, but that's not taking away anything from the third years' cos they were good people; but they seem to be really raising their game, so I take a lot from that, I see how much work they put in and I said "I need to put a little bit of extra work in coz that's not good enough really" ..." (C2/S41/L2<sup>+</sup>).</p> <p>"...I didn't even read the question, didn't even read the question properly, I was that [pause], but again it [sweat-mops brow] bursts from you, no in the last two or three years my homeostasis is out of control and I do sweat profusely sometimes and I don't know why, although I have sweated all</p>	<p>"...it's a multitude of factors; having to do some...orders and do my VAT [laugh] and do my books, really I need to keep that up to date, get the invoices out and chase the money, that didn't help, however, I did put time into the studies and I didn't appreciate the fact that I had to think about it differently with regards to the practical exams...more rehearsal and I would miss bits out, I'd say "I know that bit so I'll not bother doing it", but I should have done the whole thing because when it came to some of the exams I just flustered, it was shocking, I couldn't believe what was happening to me, inside, it just wasn't me [laugh]". (C2/S31/L1<sup>0</sup>).</p> <p>"...I got a clean bill of health basically and I thought about it</p>	<p>"...I had to perhaps think about it differently with regards to the practical exams, that there was more rehearsal [needed] and I would miss bits out. I'd say "I know that bit so I'll not bother doing it", but I should have done the whole thing because when it came to some of the exams, I just flustered, it was shocking, I couldn't believe what was happening to me, inside, it just wasn't me [laugh]". (C2/S31/L4<sup>+</sup>)</p> <p>"I think by taking some time out, because I didn't know what was wrong, and again I'm being really honest with you, I went to the doctors to see if there was anything physically wrong and, mentally wrong, and I came back with a clean bill of health, I thought I was anyway, but I was starting I to think I</p>

	<p>my life very easily, I used to play football and my head was wringing just all the time, and just now I've started sweating and I don't know why, cos I feel comfortable..." (C2/S53/L1<sup>1</sup>);</p> <p>"But then again there was a couple of physios that felt that way so they couldn't have been all wrong" (C2/S61/L1<sup>0</sup>);</p> <p>"...for the last 30 years I've been self-motivated to do [pause] everything in my life, but I think, you hang on to the basic values, of listening and I think the first, and perhaps second year, although I'm redoing it again, I know the way that I approached things was, if someone came to see me, I knew what it was, what was wrong with them, I knew how to fix them, and my second year has taught me that, I need to open up and think about different aspects of a problem, so that's the biggest breakthrough for me, and [pause] perhaps nine times out of ten that I may be correct in diagnosing it but, there is going to be this one out of ten that you are not so, you go from that..." (C2/S69/L1<sup>0</sup>);</p>	<p>because I didn't really want to continue with physio, and I told [named staff] that I wanted to stop, I wasn't enjoying it, and he said take 2 or 3 months to think about it, and that sort of took a weight off me, I don't know why [laugh], and this continued and I focused on my work and my cycling, which I love, and I got a strange call from [named staff] and she said what you doing [Participants name], are you coming back? and I think I am, I think I am, so I came into see [named staff] and said yeah I want to do it, I'm not a quitter, I can do this, and he said OK well this is what you have to do..." (C2/S35/L1<sup>0</sup>);</p> <p>"I was missing out things about some of the red flags and I knew about it, I could tell you why, but I was omitting them from the initial assessment, and I just didn't enjoy it, I kept on getting negative feedback, I didn't enjoy that, I don't work well that, I don't think anyone works well with that." (C2/S59/L1<sup>1</sup>);</p> <p>"...I had two practical's [exams] last year, one I did really poorly in and the second one, I didn't care, I stopped studying, I said "I am not going to do another bit of studying" and I thought I did OK, but I got a poor mark again [laughing] I seem to be 10 or 15 points out, but I enjoyed it, I had a bit of a rapport with the patient [model], it wasn't a great demonstration, but I got the process done, but [laughing] I was devastated because I thought that's a 60 odd percent [laugh]; I didn't have the 'evidence' and so it was quite right, the mark was fair, I need to go back to the crib sheet [marking criteria], which I didn't do, in the first and second year like I'm doing now, I'm glad of the crib sheet..." (C2/S71/L11<sup>0</sup>).</p> <p>"I do hope that I more equipped to deal with the practical's that, em, I should know [laugh] I don't feel as if I need any help, I'm not, I don't, yeah I'm looking forward to the exams, I did the last time cos I do enjoy what I'm doing, I really do" (C2/S73/L1<sup>0</sup>)</p>	<p>need to cover every angle here because I even if I don't do physio again then, no matter what I do, I don't want to be in this situation again." (C2/S33/L1<sup>1</sup>);</p> <p>"I do feel positive and happier with myself; I got 'the public health' done and I didn't get a great mark but I didn't get a bad mark, it was OK, I thought it was worth more but I was happyish with the marks, so that helped and I'm on the right path and I just have to do a little bit more and adapt a couple of extra things because I want to get a decent mark, I really do, because I can do some of the things that I did last year with my eyes closed, it's crazy, it really is, I can't comprehend why I got myself in a tizz." (C2/S39/L1<sup>0</sup>).</p> <p>"I think last year I was struggling and I didn't realise it, and it got to me and, but I think the onus should be on me as an individual, saying to someone I need help or, I need assistance, or I'm not coping or whatever it was, cos you know, I'm not sure about the coping but I need support, but that came back to me I should have been more open and I wasn't." (C2/S47/L1<sup>1</sup>);</p> <p>"...I think that's why we're training, when things do go wrong you learn from it and you apply it and [pause] I was just, the [placement location named] had just got to me so much that I lost all confidence, I really did, and it got to me big style." (C2/S67/L1<sup>0</sup>);</p> <p>"...during the 3, 4 month [pause]...the doctor checked me medically and he says, like mentally, are you happy going through another source, [talking therapy]...I did this by phone and went through a seven stage scenario, [pause] I completed it, it was quite easy, and you know the result from it was, you don't really need us [laughing], because one of the things the doctor said "do you want anti-depressants", and I said I'm not depressed, I've never been depressed, I don't want that, I want to tackle it myself, I want to fix it myself, and...I go to yoga with my wife and I can relax quite easily, and I go to the gym most times when I'm here, and I keep myself active; so, there are a couple of tools in place to help me deal with it, but you don't know until the next practical comes up." (C2/S71/ L1<sup>0</sup>);</p>
<b>Case 3</b>	<p>"...from previous experiences [of assignments/exams] ...I know it will be ok, but it's just not going to be pleasant...but then it's your eyes on the prize." (C3/S11/L8<sup>0</sup>);</p>	<p>"... [you learn] how far you can go, you can be pushed, how far can you push yourself and come out of it. You have to be willing for it to be hard, but you definitely take from that I did it</p>	<p>"...the fact that you can criticise shows that you've taken something from it because you've understood it enough to criticise it...I'm kind of struggling to say what it was that I</p>

	<p>"...I'm not really confident about my writing, not super confident even if you are getting good results, but you practice and the practice worked out and I would still be critical of myself in that I still wouldn't rate that as a strength but I kind of enjoy practice." (C3/S31/L13*);</p> <p>"...I'm not quick in writing...so I know now to approach the problem differently and...think "ok I've got so much time to get this done and it's going to take me a while so I'm not going to end up rushing" and I keep reminding myself...I think I'm writing at a much higher level, so obviously its working consciously or otherwise..." (C3/S33/L1*);</p> <p>"...it's just all confirmation...I'm getting it right and...coming in believing it and then applying, engaging it, applying yourself and then getting it right and getting good feedback and...I believe even more so in what I'm doing...and I enjoy doing it and I enjoy getting it right." (C3/S49/L1*);</p> <p>"...hard work is definitely a factor as obvious as it may sound...you really do get out of it what you put into it...this might seem a bit silly...but...self-belief to a point 'I think I can' and I think that probably comes out of good feedback and...having good placements, that you're getting it right and you have to take from that "yes, I can do this, people who know how to do this are telling me that I can do this", so listening...I think it's easy to be hard on yourself and I know that I can be hard on myself...but...I think I can do it when I think it's worth doing and the two of those kind of knock off each other" (C3/S53/L1*);</p>	<p>and it worked out fine. It was really difficult but it worked and I know I can do it, I can work hard and come out of it quite well I know it will be ok, but it's just not going to be pleasant...but then it's your eyes on the prize." (C3/S11/L1*).</p>	<p>found frustrating about that placement, I think...I even felt I could have done more but that I was kind of bound by the activities of the rest of the team and you don't want to be kind of making waves or suggesting that you should do something because you're not that confident in yourself yet but you still feel that you could...then part of me would think 'do I feel bad because I didn't...speak up' I don't know. (C3/S27/L1*);</p> <p>"...that's the thing, value for the effort and seeing that you are getting something out of it...and then...not so much patting yourself on the back, but saying "I can take something from this and these small goals on the way to qualifying" I think you can kind of say that was good, well done you know." (C3/S55/L1*);</p>
<b>Case 4</b>	<p>"...I knew what was expected of me...going...into second year, I knew that I had to be organised, I had to really juggle modules at the same time...I...knew a bit more how to do that this time around, rather than first year [where]...everything was going on and it was all a bit confusing but...the spare time helped me to be able to...keep up with them because I found that you can't be more interested in one module and...neglect other ones you're not as interested in, but you have to be able to do them at the same time..." (C4/S11/L1<sup>0</sup>);</p>	<p>"...Then we came to the exams just before Christmas and I was a bit disappointed with them, because I felt...I was so keen to get home for Christmas that I kind of lost focus [on] what I needed to do and that was my fault; and I was disappointed in myself as to how I performed; I felt I could have done better..." (C4/S11/L10*);</p> <p>"...I...shook that off [the practical exam disappointment] after Christmas and thought I'll just start the second semester afresh, try and get the best marks that I can to bring up my score for second year, because I...had a bit reflection over that Christmas and thought you can't let it bog you down because then you'll just carry on the rest of the year with that kind of attitude." (C4/S11/L13*);</p>	<p>[Reflecting on the first year 2 placement] "...I didn't enjoy it...it was a very tiring placement and it challenged me both with my knowledge and also emotionally and my endurance of doing this course; and I knew that there would be highs and lows...I just...took it on the chin that neuro isn't probably for me, but I'm not going to make that decision on just one placement...I didn't have a good time that time, but I would be keen to do neuro again to try and change my mind about it..." (C4/S13/L12*);</p> <p>"...now I know how to go about finding the information. In first year it was such a frantic time of "I don't how to do this", "I don't know where to find it", "I don't know what I'm doing" and</p>



		<p>"I think I've developed that [resilience] as I've got older, when I was younger I used to be very competitive and...I would hate to disappoint myself and I still do, but I don't beat myself up about it anymore, I'd rather just...acknowledge it and...move on from there and try and do better next time, cos I just don't see the point in beating yourself up about it anymore, because it doesn't achieve anything, that's just come with growing up and...because this course has challenged me so much, It's better just to take on the next challenge rather than get side tracked by the last one, cos there is always something new, so it's just better to move on to the next thing." (C4/S13/L1*);</p> <p>"...you just have to keep going...second year was tough when I hit a low in semester two, cos you're exactly half way through the course and you just have to keep persevering...it goes so fast...you put your head down and you just do it. That makes it sound like I didn't enjoy it, I did, but there are highs and lows and you can't...let the lows bring you down and...lose faith...because it is only a three year course...only three years of your life...just cos you're having a bad time at that point doesn't mean that's going to continue..." (C4/S33/L1<sup>0</sup>);</p> <p>"...I think sheer determination is what got me through it and also probably because I've got quite pushy parents who said "now pick yourself up, come on you can do it" ...I think if I'd gone home in February and I'd been really, really, down about it and my parents had gone... "you don't have to go back" ...I wouldn't have, but I would have regretted it, I'm really glad I pushed through because...I felt like more and more ready to be what I am aiming for, I'm getting closer..." (C4/S33/L7<sup>0</sup>);</p>	<p>that's fine because that is what first year is for, is to find your feet and to adjust..." (C4/S37/L6<sup>0</sup>).</p> <p>"...I'm just so glad I pushed through and kept going with it because, I would have been kicking myself now if I hadn't, because it's just...so rewarding and if I hadn't had...that good MSK placement, that would have been a big blow...if you have a bad placement...it hits your confidence, but I knew that there would be highs and lows, and that was a low, and doesn't mean that it's not going to get better...I am quite a positive person, I'm realistic, but I'm positive because I know I need to push myself, I am a bit of a lazy person and I know I need to push myself, to give myself a kick up the bum to just keep going..." (C4/S33/L13<sup>0</sup>);</p> <p>"...its confidence...in first year I was so anxious...I didn't really believe in myself that I could do this...then having feedback that I can and I'm good at some things and good at things that I didn't expect I would be, of course there's holes in my knowledge and there are places where I need to develop...but getting feedback..." you did this well" ...it just helps fuel your thirst for wanting to learn more and wanting to have that feeling again..." (C4/S37/L1*);</p> <p>"...doing placements...you learn a lot about yourself and... what interests you and what you find difficult and its developing areas that you find difficult, it's tough because you want to do the areas that you like cos you're interested, but you need to recognise that, you need to build up both in order to be...an all-rounder; and at the end of this, looking for jobs...they are going to like the person who knows a bit of everything and who can develop...areas even if they don't like it..." (C4/S37/L15*);</p> <p>"...when you are learning something new...you should... not judge it too quickly...and give up on it too soon. I think I learned that after my stroke placement...how much I really didn't like it and I thought, "no I'm not going to let that...put a big x beside neuro, because it's such a huge area and there is so much to learn in it..." (C4/S37/L21<sup>0</sup>);</p>
<b>Case 5</b>	<p>"...I knew it was going to be a challenging course...but I think it's been a little more challenging for me with the added circumstances...knowledge-wise I...expected it to be this amount but [sometimes I think] "I know nothing" and then someone from outside will say "oh I've got a pain in my back"</p>	<p>"... [Semester 1 was] very intense, a lot of work to begin with, especially after having two months off; but I had a couple of circumstances which put me back a lot with my exams and progress. I had a really close family friend die the day before [the 'Public Health' module] exam, so I didn't take the exam</p>	<p>"...I...did the ['Public Health' presentation] ...in December, which I passed...so...I was just catching up with everybody from first year, where I'd failed a couple of the exams and...I've always been kind of clinging on to the course..." (C5/S8/L7*);</p>

	<p>and I'll have a look at it and be able to...give a brief diagnosis of what I think it is and then you...look back and [realise] I have learned quite a bit; I do understand what I'm talking about" (C5/S56/L1<sup>0</sup>);</p>	<p>[in October] and took it in December; but between those two dates I also had my grandma die three weeks after my family friend, so that again jeopardised my other two [practical] exams which were meant to be in December, so everything threw me..." (C5/S8/L1<sup>1</sup>).</p> <p>"...I don't know if it was just the timing of [January placement] or, if I didn't click with the educators; but normally I wake up in the morning of placement and I'm really looking forward to it, but with that one I just didn't want to be there. I'd wake up in the morning and think maybe I could think of an excuse not to go in, it wasn't for me! It might have just been...neuro isn't my cup of tea...but I nearly came off the course because of it..." (C5/S10/L4<sup>1</sup>);</p> <p>"...it was a bit of a rocky couple of months from January to April; and then in April we had our other...placement which was...a musculo-skeletal placement in an outpatient clinic. I absolutely loved it and that...confirmed that...was just a bad placement previous and this is definitely what I want to do. So there has [ironic laugh] been quite a few ups and downs in the course, but I'm still here em." (C5/S10/L9<sup>0</sup>);</p> <p>"...we had [three] different modules going on at the same time, all essay based and all had to be in within a month of each other. So with the pressure of having those two [December] exams to retake and the three essays there was quite a lot going on [laughing]. I decided to take [one of the practical exams] in September instead to try and relieve that pressure; but that added pressure onto year three so I feel like I'm [pause] clinging on to this course [pause] I've never really been with the course, or been with the group..." (C5/S18/L1<sup>0</sup>).</p>	<p>"I think the feedback's been really good, but I should have taken it upon myself to go and see the marker and get some feedback in person [pause] cos for my learning I think that's better for me, to actually speak to the marker instead of written feedback...maybe I should have done that prior to [pause] handing in the essay and [pause] go with a plan [pause] and that's...where I struggle, I don't make a plan, I don't really know how to make a plan and that's [pause] not a good thing [laugh]." (C5/S30/L1<sup>0</sup>).</p> <p>"[laughing] I still do feel I'm not prepared to go to the big wide-world, but I guess you learn while you're...in a job, you learn off other professionals. It's that novice to expert...in uni we learn off our lecturers and we go on placement and learn off our educators; but when we go into a job we'll learn off the Band 6, 7 and 8 and each other, so I think you'll always continuously be learning which is a good thing." (C5/S58/L1<sup>0</sup>);</p>
<b>Case 6</b>	<p>"... [Semester 1] ...made me realise I need to take a step back and...[not] panic; just think and work through things a bit better, like have a checklist in my head and...second year was where...I'd already done it a bit in first year, [I realised] I need to reflect on stuff, but second year I...thought, I've seen how important [reflection] is in terms of [linking]...placement and stuff...it just fits together a bit better. First year you just...learn stuff and then second year it kind of fitted together a bit better... [which is] why you needed to reflect..." (C6/S7/L1<sup>1</sup>);</p>	<p>"...a negative about [the practical exams] ...I thought my first exam good, but then my second exam, I was so excited to go home that I just wanted to get it done and...I messed up on simple things that I could have done better, but I enjoyed both of them and I'm pleased that I got them before Christmas." (C6/S5/L18<sup>0</sup>);</p>	<p>"...it's always important to be able to look at your strengths and weaknesses and improve on them; because nobody is perfect and there is always something that you can develop..." (C6/S19/L1<sup>1</sup>);</p> <p>"...so many people had said no...it wasn't going to happen [get onto the physio degree] ...when I'd got to college and I got good grades...my tutor...helped me... [to focus on] ... "the end goal is going to be worth being stuck in the college when [you] don't want to be here"; and now I can see that it was worth it...I feel happy with what I've achieved so far...if I</p>

	<p>"...I don't know where it came from [semester 2 organisation] I knew if I got them [assignments] all done, then I could...go home ready for summer...but I [knew]...I need to get organised and...when I got my marks back...my 'Long-term conditions' mark was the best one I had got and my other two were reasonable, so that was very good." (C6/S13/L1*);</p> <p>"...I'm more organised, I find out what I've got to do; with this essay that I've done I wanted to know what we had to do ages before it had to be due in whereas in first year I was more nervous about what I had to do so I stepped back a bit, whereas now I want to know what to do so I can get it done and I don't have to stress about it..." (C6/S25/L1*);</p> <p>"I think [my learning]...has changed a little bit...I realised that I need to buck my ideas up and get organised... second year was just getting myself sorted, ready to come into third year and...I admit I'm not the most academic person in the world...it's not an easy thing for me to do, so it takes me...three weeks to write something that would take somebody...a week so...I've just had to concentrate and [say] "right get on"...it's what I want...the goal at the end is...so big [laughing] ...if I graduate...I would be the happiest person in the world, it means so much" (C6/S35/L1*);</p>		<p>hadn't gone to college I wouldn't be here, so everything happens for a reason..." (C6/S29/L2<sup>0</sup>);</p> <p>"... [I have] no regrets, all good so far...I am happy, it's just a good course...obviously I've not been to another uni, but Northumbria...they take care of you...look after you and...everybody is so helpful and if you're stuck, I think in first year I [thought] "oh I'm going to look dead silly going to ask for help" but now...everybody wants you to ask for help, they don't want you to be stuck...the course is amazing I like it [laugh]." (C6/S41/L1*);</p> <p>"...if you want help you're given [it] ...whether it's...accommodation, or whether it's uni...tutors, but you've got to use them...there are so many of us...[staff] couldn't chase after us...you've given us all the tools but it's up to me or anybody else to use them..." (C6/S43/L1*);</p>
<b>Case 7</b>	<p>"...I've always probably taken too much on...that's just my nature. I probably don't know how to say "no" ...I'm already committed to a lot of things...I feel like if you get the opportunity...I don't want to say "no" ..." (C7/S11/L2);</p> <p>"...I've given a lot [of work] up this year, a lot of work abroad. I had some nice jobs abroad and I've said "I just can't do them" ...I know I've got to prioritise, that's the main thing...but... I tried to help with work over the Commonwealth Games...but I made sure everything was done in and in place before I did it..." (C7/S11/L5<sup>0</sup>);</p> <p>"...I'd...come into uni and [thought]... "I'll stay and finish this off" and I just can't, I've got to get back for 3.00 [child-care] and... then I've got to do a bit of work and then I'm back home and there's no chance, so it's definitely time with me...and when I do have time I will put things off..." (C7/S21/L1);</p>	<p>"...I've had to [work throughout the course] to keep mortgage payments and stuff [laughing]..." (C7/S11/L1*);</p> <p>"...I never wanted to have children to leave them; although I have to do that to get through this, it's a temporary thing, it's three years and [I'll] do it, I've got good support from home, it's never ever been questioned "you shouldn't have done this, you should have just carried on doing your job". I probably feel a bit guilty because of the time it's taken me away from home and being a mum." (C7/S79/L7<sup>0</sup>).</p>	<p>"I found it really difficult [at the beginning of year 2] it was a massive rush to get everything in and I felt my time management hadn't [improved] sitting down and saying "right I've got to do this now" I found it really difficult, I just had too [many] other things on and I've just been worried about 'can I get my work in'?" (C7/S9/L1*);</p> <p>"... [reflection] it's constant...they drill it in at university...you have to reflect and [it] was probably something that I've always done...because it's the only way you can learn; I don't think you can only learn by making mistakes but I think acknowledging what you don't know is the only way you can learn without a doubt." (C7/S59/L1*);</p>
<b>Case 8</b>	<p>"...the 'public health' [module] presentation at the start of second year I failed, basically because I interpreted it wrong,</p>	<p>"...[The clinical educator] gave me no indication that I was doing well, I was expecting to be told I had to buck my ideas</p>	<p>"The [reflective] process wasn't [difficult] ...it came to me on a placement...a patient incident which should be reflected on,</p>

	that made me more driven to make sure all my other marks are up to a good standard; and I basically took my social life out of the equation, focusing all my energy on [practical exams] and I passed them reasonably well; I tried to know my limits and drive myself and discipline myself.” (C8/S25/L8 <sup>0</sup> ).	up or I would fail the placement...she then started to give me praise and the last week I felt like I came on leaps and bounds, she trusted me with more patients just on my own...assessing and reasoning and treating and she...let me create [exercise] programmes for them; she ended up giving me quite a lot of responsibility for a second year student; but I would never have expected that from the first couple of weeks where I got nothing but criticism...” (C8/S47/L7 <sup>0</sup> );  “... [The Educators criticism] made me feel rubbish, I was going to placement everyday just dreading it and...if there was a new patient coming I was hoping she would say “I’ll take this one you can just watch”; and it got to the stage where I was hoping not to be with a patient to avoid the criticism...” (S49/L1 <sup>1</sup> );	so I...I reflected on what I’d done and what maybe went wrong, what I could have done better...” (C8/S19/L1 <sup>1</sup> );  “...I did reflect on it [a poor module mark in year 1] and the bottom line was I hadn’t done enough revision; I hadn’t put enough work in and I knew going into it that it wasn’t going to be a strong mark; but it wasn’t a mark that I was happy with, it was something I wanted to change and that was the kick start for me really working hard, that result was what drove me and I showed to myself that with work I could change things...” (C8/S25/L1 <sup>0</sup> ).
<b>Case 9</b>	“...the modules [helped me], initially it was very lecture heavy in the first few weeks, there was quite a lot of theoretical stuff, but once we got going with the practical aspects I felt a lot more engaged and a bit more enthusiastic you could see the point of the theoretical stuff [how it] fitted into the practical aspects...” (C9/S11/L1 <sup>+</sup> ).	“... [Returning to year 2] it was coming back to a place where I suppose I was when things weren’t going too well last year [father’s illness & death] where I hadn’t really been for a little while, that had an impact on things definitely, I had a bit of association with working here and what had happened in the first year, so that slowed me down engaging...” (C9/S9/L1 <sup>-</sup> ).  “... [My approach is] I just put the hours in. I’m not very efficient at writing essays I get a lot of wasted hours; but [I] put the hours in, being dogged and having a plan, spider diagrams that sort of thing has really helped me; and I can see that things are better when I’ve done that, than when I haven’t...” (C9/S63/L1 <sup>0</sup> ).	“... [‘Public Health’ module assessment] I don’t think I put the hours in and practiced saying the presentation; because of my limited IT skills, it [presentation] looked fairly basic so visually it’s not particularly engaging; because I haven’t put the practice in and talked through the presentation, it didn’t come across as well as it should do; content wise I’m ok, but presentation wise I dropped marks” (C9/S19/L1 <sup>0</sup> ).  “...when I look back at it [the elective], it wasn’t a positive place, but it didn’t change what I was taught, or how I learned things, so it was more an external factor which didn’t really change the way I was learning things...” (C9/S81/L1 <sup>0</sup> ).
<b>Participants</b>	<b>4. Caring/Altruism</b>	<b>5. Interpersonal relationships</b>	<b>6. Attitude to learning</b>
<b>Case 1</b>	“...you saw people that were really poorly and ventilated and without that they wouldn’t have survived, so you...look at the positive and it’s really sad that this lady died or that lady died, but...they were kept alive this long and they did progress, but it didn’t work out; and it’s not like there was anything more to do...there wasn’t that feeling of “oh what else could we have done”...it was...intensive care...it wasn’t anyone’s fault, it just happened, it wasn’t neglect or care that had gone wrong, and also you’re seeing people that didn’t look like they were going to survive and then walking out by the end of placement and things like that”. (C1/S49/L1 <sup>+</sup> );	“...I keep myself to myself not in a loner way, but I don’t need to know everyone in the class to learn” (C1/S9/L1 <sup>-</sup> ).  “My educator was team leader so had lots of...administrative things to do...which [meant me and] the other student would manage the ward together with the assistant which was scary but really good confidence...boost” (C1/S37/L4 <sup>+</sup> );	“...when I first started [pause] I found it quite overwhelming [pause] because there was a lot more I didn’t know, I didn’t know how to find it [information] particularly well, whereas I find that [I have] the confidence to ask questions and relate it to other knowledge I have...” (C1/S61/L1 <sup>0</sup> ).  “...I find observing first and then...educators that talk through it, either with a patient or with yourself...underpinning some of the theory behind it...I find that a bit easier...” (C1/S63/L1 <sup>+</sup> );  “...I feel I’ve got the confidence to say “I don’t [know], I need to look this up...can you give me a clue or guidance?”, on placements”. (C1/S65/L7 <sup>+</sup> );

			<p>"I...also ask for feedback...and ask if there's maybe anything that I'd missed out or that I could have done better or can progress to; and I guess I've been lucky to have educators that were...critical and questioning but in a positive and a learning way, not in a way to catch you out...but to make you think further and push you to expand your knowledge, so that was good". (S67/L1*);</p>
Case 2		<p>"...in the 2nd year last year there was a couple, just one or two people who didn't want to know me, and I didn't take it to heart, I just thought it's the age gap and some are young and still immature, and the one or two people that were like that they are mature now, and they chat to me and it's interesting that perhaps more and more people could have been like that and that would be a bit disheartening for me if more people were like that." (C2/S45/L3<sup>0</sup>).</p> <p>"...I wasn't comfortable with the tutor and I should have been loud enough to say, "I want to change the tutor", nothing wrong with the tutor...we got on, so there's no hatred or animosity between us, it's just, I did not feel comfortable, I wasn't getting the best out of me, on the tutoring bit and perhaps I should have changed to someone who I could be more open with then that might have been helpful for me." (C2/S49/L1<sup>-</sup>).</p> <p>"...there's still [pause] a small doubt with regard to placements, because one of the placements especially didn't work out well; and the second placement I set myself up for a fall, so there is a small doubt there because, I didn't accept what the physio said, that I wasn't cut out to be a physio, and that knocked me for six. I don't know why, cos I'm a bullish person, people can say things to me and...I did say to her, "it doesn't matter what you think I'm still going to do this", [laughing] I actually enjoyed, I loved, the people coming in MSK, everyone was great and the variety, I loved it, I just wasn't that good at it, and I don't know why, I wasn't good at all." (C2/S57/L1<sup>-</sup>).</p> <p>"...I did think she had expectations that because I am mature, because I treat people at home...I'm not sure, but she was disappointed, she thought I'd be up here [raised hand gesture] when I was down here [lowering hand gesture] although it didn't go well for me I did enjoy meeting the patients and I got a lot from it, but [pause] didn't pass it." (C2/S63/L1<sup>0</sup>).</p>	

<p><b>Case 3</b></p>	<p>“... [I am] more open to elderly care now, I remember thinking... “I don’t really want to do this but I am going to have to...”; the ageing population...it’s going to be a huge factor...again its challenging...yourself and your beliefs...engaging with it; and there were areas...that I thought I was right about before I went in and there were areas that I was completely and utterly wrong...there was just a really good culture...the consultant was really nice, really good with people and...it was...upbeat and very optimistic about care of the elderly, which is really nice to see...they’re not written off...and it was really great to see...good leadership...there was a different climate on...the other [ward], you can’t have the good without the bad...you can learn from both...I definitely took a lot from it...” (C3/S21/L1*);</p> <p>“...the placement...it’s an interesting one...I think it might have been a bad experience...it was really interesting coming from the previous placement to dealing with a similar client group...it was just really a very uninspiring placement...nobody was negligent but I think that people could have done just so much more...I felt that people really did have a very easy ride there...[I] didn’t really have the same rapport with my educator and it was an ok placement and I definitely learned things but it just wasn’t great...compared with other placements...” (C3/S21/L34<sup>0</sup>);</p>	<p>“...even in activities that are quite individual like writing an essay [pause] we’ll still meet up [pause] we’ll still argue and draw all over a white board and take photos of it and argue everything out and you come away feeling better about it [pause]...it’s good to be able to bounce off with people...I’ve definitely learned about how I learned from the last few years...” (C3/S35/L2*).</p> <p>“...I really benefitted from two different clinical educators because one...was...Bobath [neurodevelopmental rehabilitation concept], and the other...was that bit more ‘exercisy’, ‘Carr and Shepherdry’ [motor learning rehabilitation concept] and she was great at...pushing people, pushing old people with Parkinson’s and...pushing people really hard and...it was great for me to see that, that you can go that hard on somebody...within reason of course...it was really good to see that but then...I don’t want to take anything from the other educator because I still learned an awful lot from her...” (S37/L7*);</p> <p>“...it wasn’t such a great placement; it is important to see the good and the bad you know you can take from both” (C3/S43/L4<sup>0</sup>).</p>	<p>“...in terms of autonomy...from the first placement [in year 2] ...you got a workload and you didn’t have somebody strictly standing over you all the time...it was kind of a guarded autonomy... “I’ll let you work and I am confident in you that if you are not happy you will let me know”, so it was autonomy, but...with a safety net, which is what you should have [laugh]...you’re a student so...that’s ideally what you want to have at the right level...but then the confidence to...be willing to admit that you don’t know...and...it makes good sense to realise you don’t know what you’re doing and have the confidence to actually record that and say.” (C3/S47/L1*);</p> <p>“I suppose you’re just taking responsibility...you’re recognising what the challenge is and you have to just take responsibility for yourself and engage in that because that’s why you did it and that comes back to...sacrifices and giving things up for it, it’s stupid to do that if you are not going to give it everything that you have...it makes it less of a sacrifice...if you only half do something, if you give something up then don’t really apply yourself, why did you do that and then not to engage? I don’t think that was even an option for me personally...even when I was cheesed off with organisational factors you have to just get on with it.” (C3/S51/L1*).</p>
<p><b>Case 4</b></p>	<p>“...the patients [in oncology] are amazing and...they’re so keen for you to be part of their experience, it’s very touching to be considered part of their journey, its emotional but not in the way that you’d think, it’s not all doom and gloom and tears, it’s very positive...it really puts things in perspective, like the little things that I worry about and the things I put myself down about; and then these people are fighting cancer, they’ve lost all their hair possibly, they’ve been so ill they can’t get out of bed and yet they’ll still greet you with a big smile...it just means the world that you get to be part of that and as a professional you get to be part of helping that person, easing pain or easing fears...” (C4/S29/L46*);</p> <p>“...one [particular patient]...was terrified of dying...and that is so understandable...you’re there as...counsellors, as well as their physical support, I have never been in that situation before, I have never had a relative in hospital...so it was very new for me...actually being there when somebody is dying, it’s horrible, but...they want you there and that’s very</p>	<p>“...after exams...I got a neuro placement which I was really nervous about...neuro is not my strong topic, I just found it really difficult, so I absolutely crammed the work in over Christmas...and then I didn’t enjoy it...I found throughout the whole month I was always intimidated...there were highlights in it, the patients were great...but...I was just so intimidated by her [clinical educator]...I felt like I didn’t have a bond with her; and she was always really busy, so I felt...I was...a bit in the way, more than being part of the team...” (C4/S13/L8<sup>0</sup>);</p> <p>“...actually being in the setting and seeing what is expected of you and watching your educator do things that maybe one day you’ll learn to do as well...it...sinks in...why we are here and what we strive to achieve; and I just feel...placement is such a pivotal...activity in this course...you actually get to go out and your educator asks you something and you know the answer and...” I didn’t know I knew that until I was tested on it”; and you get such a rush from that...” (C4/S19/L1*);</p>	<p>“...I know...I’m not good with words, I’m not good with writing, but give me a practical task and I’ll do it happily, so I just feel like placement I come into my own a lot more easily and prove more to other people and to myself, whenever I’m actually doing it and you know just proving that I can do it and I do know...” (C4/S19/L9*);</p> <p>“...I understand...you have to have the knowledge which is on the curriculum to build-up and get the marks; I...find [on] placement I’m a lot more eager to do the reading and the learning so that I don’t look like an idiot if I get asked something...also it will help...if you get a new patient and...do a subjective [assessment] ...and then you miss out some critical bit of information, I mean that’s just going to fall back on you, it’s not good for your learning...” (C4/S21/L1*);</p> <p>“...we sometimes have placements...like paediatrics and women’s health and CF [cystic fibrosis] that we don’t</p>

	<p>special...I never felt that I was just a student, I was very much part of the team and these patients cared about me...which was so special...I...found I cared so much about them; which is why it was probably very hard to leave..." (C4/S29/L54*);</p> <p>"I really like people and interacting with people; and I like helping in whatever way I can. My oncology placement, if I hadn't met those people I wouldn't be the person I am now [pause] it does have an effect on you and you do take so much away from it whenever you meet such [pause] inspiring patients..." (C4/S35/L1*);</p> <p>"...you feel pride in yourself...[get] such a boost whenever you help someone...I got a thank you card [from a patient] and that meant so much...and I'll always keep that as...a medal..." (C4/S35/L6*);</p> <p>"...as a physio you get to be with people and get to understand people in a way that you couldn't in other jobs, definitely not in a non-related health care course...it's just such a fundamental thing of being a human being that you like to help others, it sounds really cheesy...but...it just seems like such a normal thing for me to be with people and help and talk to people; but...some people are really not, people persons, they hate talking to people, they hate being in a group and they'd much rather...be at a desk...that's just not for me. I'd rather get out there and have experiences and I think people make experiences...I went travelling in the summer and I remember the places but I remember the people clearer and it's the people that you meet along the way that make the experience..." (C4/S35/L11*);</p>	<p>"...even when you don't know, a lot of the clinical educators are so cool about it, they're just, "you're still learning that's fine but read up on it" and then you take it up and you have this build-up of knowledge that you develop from..." (C4/S19/L12*);</p> <p>"...I find that on placement you certainly recognise those holes [in your knowledge] a lot easier...in university you...get swept up in the curriculum and what you're supposed to be learning...for the exam or the assignment and...on placement it's more because you want to prove to your educator that you do know it..." (C4/S19/L15*);</p> <p>"...I...recommend people...take on what their educators [are] saying, even if you don't get on with them...they know a lot more than you do and the only way you're going to get better is to take advice from other people...that's what I had to do...just absorb knowledge like a sponge and take in as much as I could, because it was...a lot to take in and I really enjoyed that...kind of [placement] learning..." (C4/S21/L8*);</p> <p>"...it's...awkward talking to your educator sometimes whenever you do have a problem...the educators I had were brilliant...there were no problems...but...looking back...to my January placement where I didn't click with my educator, it would have been nice to have someone like this co-ordinator [elective placement]...where I could have gone and talked to them...told them my worries and...they would have discreetly got on...to the other professional...whenever it comes from a student it can sound a bit whiney...like "pay me attention", but if it's coming from another professional...they take it on a bit more and...then...it's not taken out on you..." (C4/S29/L12<sup>0</sup>);</p> <p>"[reflecting on working with peers] ...because you have that...element of fun...you boost each other up and whenever someone is having a freak out, there is always the person in the room...[saying]" stop it, just stop it, you're not helping" ...and we're all quite blunt with each other which helps...over this course you really do form bonds with people and you get to know each other very quickly and you can just be yourself. I find that I work better...in groups and I don't work in the library I just can't. I find that working in a group, in an environment that I was comfortable in helped so much and I didn't feel pressured and I didn't have fear of the</p>	<p>specifically learn in university but...you will have done skills that you can use in them..." (C4/S29/L25*);</p>
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		<p>deadline, because you were...all doing it together..." (C4/S31/L1*);</p> <p>"...we never ever copied each other's work but we bounced around ideas together and proof read each other's work; others are better at doing assignments and I know I find it quite difficult because I've never really had to write essays before. It's just bringing each other's skills together...if someone is really good at braining storming ideas...and others are really good at finding the research; and then others were...good at proof reading and correcting grammar...that was really nice for me because we were all doing it together..." (C4/S31/L8*);</p>	
<b>Case 5</b>	<p>"...my placement in MSK was amazing and it's really, really secured that this is definitely what I want to do. I think that's the area that I want to be in, I like the excitement of not knowing what's coming through the door...the satisfaction of patients as well when they leave and they go "thank you so much for helping me" ...that kept me going..." (C5/S42/L1*);</p>	<p>"...I didn't have the greatest [January] placement...I didn't click with my educator. After...everything that had happened, it just wasn't a great placement and I was thinking about coming off the course, I didn't think it was for me, I wasn't enjoying it, I was struggling a lot, I was behind everyone else; and then after that placement I didn't want to be here anymore, I just wanted to go back to...be with my mum...I felt I was a bit isolated on my own here...so [I] really struggled through January and February..." (C5/S8/L12*);</p> <p>"Never really talked about it [planning] I think it's more, "you're alright, you're on the right track", otherwise we seem to scare each other [pause] so it's probably best just to keep things at the basics [laugh]." (C5/S82/L1*).</p>	<p>"...I do feel that I learn a lot when I'm on placement, learning...off other professionals who are different ages...I find that professionals who are a bit older... [insist] "this is what goes and this is how it's got to be done"; whereas the younger professionals...are more...lenient to [alternative] treatment techniques..." (C5/S60/L2*);</p> <p>"...it is interesting, being out on placement and just having an actual patient...instead of...when we're in [university]...we pretend with each other that we've got a problem here and we've got a problem there; but you never really know until you go onto practice and you actually feel it and you understand how you can take that learning in a classroom to [practice]." (C5/S60/L6*);</p> <p>"...I think just being there in a working environment; and I think I'm more of a kinaesthetic learner, I think I need to be doing stuff to be able to learn and to feel things and go "yeah that's exactly what it feels like" and [in] cardio-respiratory to be able to listen to...a crackle...I need to be able to hear and feel [a] thing to be able to understand..." (C5/S62/L1*);</p>
<b>Case 6</b>	<p>"...with being on placement you...see how big a difference...you can make to someone's life and there are so many people that...you don't think you're doing anything...but then the smallest thing can...mean so much to somebody else. On my elective [placement], because people wanted to improve and some people had been in pain for so long...to be able to relieve someone's pain just a little bit, they're amazed and so happy and...appreciative of it...it makes you feel like warm...happy inside..." (C6/S39/L1*);</p>	<p>"...because it was community I was in a car with her [Clinical Educator] quite a lot and she asked me loads of questions and I [thought] "oh my word, what are you doing?" In the end it turned out to be a good thing; I enjoyed being put on the spot, she dragged stuff out of me. I felt I learned a lot more because she was putting me on the spot; my placement overall was amazing...I didn't think I would enjoy the community...but I did." (C6/S9/L12+)</p> <p>"[Peers are] just as important as they were the first year, we just click and when we had two practical exams [December]</p>	<p>"...I'm maybe a bit more organised...I...find out what I've got to do...with this essay that I've done...I wanted to know what we had to do ages before it had to be due in and then I could try and get it done...whereas in first year I was...more nervous about what I had to do, so I...stepped back a bit, whereas now...I want to know what to do so I can get it done and I don't have to stress about it..." (C6/S25/L1*);</p>



		<p>we were literally in uni non-stop and we were around at each other's houses if we got stuck, practicing and the day of our exams we were on the phone to try and make sure that everyone was calm; and my essays as well we will sit down and [say] "right don't panic, this is what we need to do" ..."</p> <p>(C6/S17/L1*).</p> <p>"Probably [my peers] just disagree [laugh] be like, "well I don't think that's right but"...there's normally...just one of us who [disagrees]...then the rest of us do agree and it turns out that the person that disagrees is probably wrong [laugh] so...we just work through it and like give points as to why we don't agree with it---I don't think we've ever fallen out---over something to do with uni---there's always been a reason why---that person maybe's disagrees and we all just...all agreed that we can probably do it differently..." (C6/S19/L1*);</p>	
<b>Case 7</b>	<p>"...I find it a lot easier to interact with patients than the younger students...I'm not scared of asking...for help, or...questions and I don't know whether it's because I'm older...I sympathise [empathise] more with the patients..." (C7/S35/L1*);</p> <p>"I was on an MSK [musculo-skeletal] placement...I had a few patients where they were in a lot of pain and...the treatment was really of a self-help type and they were really desperate for me to get my hands on them...I felt...I had a little bit longer time with them, obviously because I was a student...I was maybe doing...too much with them...and I worried a lot about when I finished my placement they would go back to the registered physios where they would not probably continue the type of treatment I'd been doing..."(C7/S35/L5<sup>0</sup>);</p> <p>"I've always taken a lot from my placements emotionally, I always think about the patients...a lot of things have stuck in my head...personal experiences..." (C7/S35/L12*);</p> <p>"It was my second placement in year 2...palliative care...I really did enjoy it; I took a lot away from there that I still remember really well...positives...[from] a physiotherapy point of view..." (C7/S53/L1*);</p> <p>"... [on the elective I was] able to assess someone and find a solution, treat them and...that was a really good placement because you did see them quite regularly, so you could really do a lot of work with them and see them progressing. There</p>	<p>"...you get to know your [peer] groups and...I don't know whether it's with age, you just sit back a little bit and let them all get on with it; but you get to know everyone and they're all lovely, but at the same time [they had] made friends in little groups, it's like being at school and you'll see the dynamics of the group they've already made in year 1..." (C7/S23/L1<sup>0</sup>).</p> <p>"...you can't really interchange [with peer groups] that's been difficult for me because I wasn't really established in any group; not that I can't work with anyone and I have, but my time has been, not a lonely time, I wouldn't say that cos you're surrounded by people, but I feel like I'm very much on my own doing the degree; I'm racing from here, working and what have you, so...I have to be by myself because it doesn't fit in with anybody..." (C7/S23/L5<sup>0</sup>).</p>	<p>"...in physio you're constantly learning and...I always feel like I've been like that all my life, constantly learning, that's nothing new..." (C7/S31/L3<sup>0</sup>);</p> <p>"... [Learning] intrigues me...I think 'wow, how did I not know a lot of this stuff'...it...excites me as I find out things, or learn things..." (C7/S33/L1*);</p> <p>"...it is my problem, it's like getting a sharp shock, to get things in place. I know I've got a certain length of time and I'm at it all the time because I want to get it done [pause] maybe [I] have a false sense of security that I can do things quickly or better under pressure, but I don't think that's true, I don't think it's true in anybody, it's a false thing." (C7/S47/L1<sup>0</sup>).</p> <p>"...doing something that was for me...I'll be really proud of and I'll be happy I've done it. So it's a few years out of your life to do something that you've got forever and it's not just like doing a normal degree...it's, you've been given skills with physio and you've got something...not just a job, a career...where you're actually helping someone but also you're learning...all the time and it's interesting; so it's not just I've come here to get a degree and that's all I want, it's more isn't it." (C7/S81/L1*);</p>

	<p>were a couple of patients that were just amazing, [a] poor guy had had cancer and...he'd lost his core strength...it was really something that was basic and...just after one treatment he came in and he...couldn't believe...just doing some core work...he thought he'd lost the use of his legs and it was just because he had been inactive for a long time but it was just amazing." (C7/S55/L1*);</p>		
<b>Case 8</b>	<p>"...I love this degree; what clinched it for me was making patients better and seeing them being discharged; especially if you see them all the way through and getting a patient back to doing something they didn't think they would be able to do again; for example, on the cardio placement a guy said to me "I'll never walk with my stick again"; and we got him back with his stick and he cried and that was fantastic; I nearly cried and I don't cry and I nearly cried..." (C8/S89/L1*).</p> <p>"I never thought I would want to do [cardio-respiratory] ...it's rewarding, really rewarding, almost...life changing...neuro or MSK [musculo-skeletal] ...you can make people better, but cardio, especially if you don't act...it's going to have a profound effect, it's not like a tight hamstring is going to affect you, this is the physio to your lungs and your heart that you're talking about..." (C8/S85/L8*);</p>	<p>"I like [working with peers] ...I don't like being in the library, but I'd rather be with...3, 4 or 5 of us; we sit around a computer desk and we can...say "have you done this bit yet, what kind of references do you look for" ... and I think that helps me, at the same time you get advice...you can also help other people; and if you think they'd going down the wrong line completely then you can point them in the right direction, or what you perceive to be the right direction." (C8/S31/L1*);</p> <p>"...it tends to be the 5 or 6 lads that hang out...we sit in one of the IT rooms or in the...library and just work, we don't work together, but we work with each other and help each other out, doing our own thing and that's how I like to work. I like to be able to bounce ideas off people and kind of check that I'm going down the right line." (C8/S33/L1*);</p> <p>"...one day it clicked and she [clinical educator] suddenly started praising...I don't know what changed in her, what changed in me...she was suddenly giving me praise and I [thought]...if you'd just done that from the start...I'd have got even more out of this placement and I'd have really enjoyed the first two weeks as well." (C8/S53/L4<sup>0</sup>);</p> <p>"...for me you need to have a balance between praise and criticism, because if you criticise, obviously you [the student] are making massive fundamental errors every single time and you deserve the criticism you get because...it's the patient...that's someone's injuries and someone's life that you are affecting...but when it's just little niggly things, there has got to be an element of praise in there and a balance between the praise..." (C8/S55/L3<sup>0</sup>);</p> <p>"...if I became an educator...I couldn't...expect a student to be perfect, cos I'm not perfect and you need to praise them so that they get on-board with what you're trying to teach them; because you're more likely to listen to someone you like and get on with...you're more likely to take on-board</p>	<p>"...I'd like to think I'm able to take it [feedback] on board and act on it and... occasional criticism, I'm quite good at dealing with... I've acted on that and done something about it..." (C8/S57/L1*);</p> <p>"...I learn by doing and there's no better place to do something than on...placement in a hospital, where you can see...the pathology... I love being on placement...it...gets you experience; and you can see pretty quickly... actually I'm not bad at this and I know roughly what I'm doing there or thereabouts." (C8/S61/L1*);</p>

		what they're saying rather than just yeah, yeah to the criticism yeah, yeah fine..." (C8/S55/L8 <sup>0</sup> );	
<b>Case 9</b>	<p>"...[motivation] at the start [of the course] ...was quite an ideological [caring/helping others] ...direction, away from the sales orientated work I'd been doing... one of the reasons I chose physio, I would say that's still a big factor, but...it's maybe not as big now...things changed, family wise...I'd just be...happier...getting a job and...that [caring] still being a part of it--but I think you maybe get...more realistic..." (C/9/S83/L1<sup>0</sup>);</p> <p>"...[caring] it's still a high [motivation] percentage but it's maybe not as much as things like providing for your family, getting a wage coming in after a few years of not bring in wages, [which] has increased in importance..." (C9/S85/L1<sup>0</sup>).</p>	<p>"...we [peer learning group] generally...practice things until we were confident we knew what we were doing...we were quite good at giving each other feedback...as to what was working and what was not working...quite often we ended up working in threes...so one of us would have a look at the other one [practicing on the other model] ..." (C9/S29/L5<sup>+</sup>);</p> <p>"...with us [peer learning group] it was always... "what do you think I should be doing differently" rather than any...negative attitude...generally people were always more receptive to...positive criticism ...we'd...show how you think it should be done and then...jump back into the patient [or] therapist positions and have another go...it...tended to be quite reciprocal...it worked quite well..." (C9/S31/L1<sup>+</sup>);</p>	<p>"...it is just...coming in when you're supposed to em---I wouldn't say I'm the most engaging person when in a group...I speak up when people ask questions...but... [for me] engaging mentally and...making sure you come in for all the things you're supposed to and...treating it a little bit like a job..." (C9/S87/L1<sup>0</sup>);</p> <p>"[key to a successful learning journey is] ...self-awareness...I've tried working at home, where I know that doesn't really work, even when there's nobody else in the house I struggle to get any relevant work done...knowing that doesn't work and making sure you're doing something about it...and support as well...family support has been a big help...personally, I think it's maybe a more professional outlook, coming in regularly..." (C9/S89/L1<sup>+</sup>);</p>
<b>Participants</b>	<b>7. Attraction to Physiotherapy Identity</b>		
<b>Case 1</b>	<p>"...terms of...how useful you are within a hospital, within a multi-disciplinary team, how you're...an autonomous professional...then all those things are positives and I'm more keen to be a physio now than when I applied". (C1/S85/L1<sup>+</sup>);</p>		
<b>Case 2</b>	<p>"...I got a clean bill of health and I thought about it and because I didn't really want to continue with physio I told [named staff] that I didn't want to, I wanted to stop, I wasn't enjoying it, (C2/S35/L1<sup>-</sup>)</p> <p>"...I got a strange call from [named staff] and she said what you doing, are you coming back? And, I think I am, I think I am, so I came into see [named staff] and said yeah, I want to do it, I'm not a quitter, I can do this..." (C2/S35/L4<sup>0</sup>);</p>		
<b>Case 3</b>	<p>"...I think the placements going up a gear in terms of what you are getting...workload wise...you're getting good feedback, it's that confirmation...you're getting it right and it's recognising with each placement that you're getting a bit more...and you're not buckling, you're not messing it up...obviously...getting the new skills and...it's physio, its real physio...what you were doing in the first year isn't specifically physio, it's anatomy, physiology and patho-physiology, so it could apply to a lot of health care, whereas what you do in the second year is real physio..." (C3/S45/L1<sup>+</sup>);</p>		
<b>Case 4</b>	<p>"... [The elective placement] really fuelled my enthusiasm for what I was doing...I was buzzing to come back for third year and...bring back the skills I had learned on oncology, which were quite specialised and quite specific to that area and...one of my educators said, "if you can deal with this area you can deal with pretty much anything" and that just gave me so much enthusiasm to bring back to the course...I felt I could take on anything at that point..." (C4/S29/L39<sup>+</sup>);</p>		
<b>Case 5</b>	<p>"...I still do enjoy it [physiotherapy] and I...still have the same feelings towards it...when I started I knew why I wanted to do physio and it's the same now, I want to help people. I do appreciate it a lot more, I do understand how important it is. When I first came on to the course I thought "oh it'll only be important for sport and musculo-skeletal", I didn't really realise how...broad it was in terms of neuro, cardio, respiratory, so it has made me appreciate the depth that physio goes..." (C5/S54/L1<sup>+</sup>);</p> <p>"...the MSK placement was the confirming one that this is where I wanted to be. I do feel I learn a lot when I'm on placement, learning off other professionals. It is interesting being on placement having an actual patient instead of; when we're in [university] we pretend with each other that we've got a problem but you never really know until you go onto practice and you actually feel it and you understand how you can take that learning in a classroom to [practice]..." (C5/S60/L2<sup>+</sup>).</p>		
<b>Case 6</b>	<p>"I am [motivated by the] variety, physios...have...a bigger spectrum of where they can go with their skills...there are just so many opportunities...but then when I was younger I wouldn't have known...[I] just thought...help to maintain and improve somebody's mobility but.... that was enough in my head, cos it was helping somebody; whereas now I've got a better understanding of what physio is and what it entails..." (C6/S37/L1<sup>+</sup>);</p>		
<b>Case 7</b>	<p>"...in physio you're constantly learning and...I've been like that all my life, constantly learning, that's nothing, new..." (C7/S31/L3<sup>0</sup>);</p> <p>"...you get a buzz, as a bonus, that you do an assessment and you know what it is; and then you do the treatment and it works and I think that's like winning something..." (C7/S57/L1<sup>+</sup>)</p>		

<b>Case 8</b>	<p>“...looking back I could quite easily...[have] tried to be a teacher...in physio you’re going to help someone and generally people who come, especially in outpatients, they come to you because they want to be made better and they’re going to engage with things, whereas in teaching there is always people who don’t want to do it, there are people who do want to do it... physio...opens more doors, because you’ve got the physio career and...I now realise how broad physiotherapy is...” (C8/S87/L1<sup>+</sup>);</p> <p>“...obviously there are people you can’t help and don’t want help and some people will never engage with it...and it frustrates you, just as much as the other people who make you happy and make the job worthwhile but...if you can make someone’s life back to where they want it to be after major surgery, then that is a...massive thing and I love it...” (C8/S89/L6<sup>0</sup>);</p>
<b>Case 9</b>	<p>“...the more you know about physio the more you...think of...people who are more in need...following that ideological view point, I would probably go into something where you were helping people more severely disabled or impaired...whereas...I would just happily do anything now...to get experience and to get in the door... [caring]...it’s still definitely a big part but not as big as it was at the end of first year.” (C9/S85/L3<sup>0</sup>);</p>

## APPENDIX 11: PHASE 3 INTERVIEW DATA MATRIX EXAMPLES OF THE EMERGENT PERSONAL CHARACTERISTICS.

Participants	1 Conscientiousness	2 Resilience	3 Reflection
<b>Case 1</b>	<p>"...I did a sport massage qualification in that time as well, that was really interesting...made you revise" (C1/S3/L3+)</p> <p>"...when I start something I want to complete it; but repeating the second year I knew that I wasn't qualifying that particular year, so I had an extra year and I suppose I could relax a little bit, I was just less terrified and that helped, if you are less scared of things you then have the confidence to do further research and not take risks but...go out of your comfort zone." (C1/S45/L1<sup>0</sup>)</p>	<p>"...positive feedback is unexpected sometimes, so that obviously helps my confidence; when I get negative feedback I already expect it and often points to what I am aware of; but I find the negative feedback more helpful so I can make sure I don't make the mistake again. With practical exams, negative feedback is 'areas to improve' and we always have areas to improve so I found the feedback helpful, there's never been feedback that's been negative for no reason it has a purpose." (C1/S43/L1+).</p> <p>"...all my deadlines went haywire cos my dad died, so I had some time off, which was good for me; but then I hadn't done very much so it made everything a bit more stressful, it all got compressed towards the end; but I managed to get my dissertation in before my placement, the placement started and my assignment happened at the start of placement and my presentation at the end, so it all got a bit smushed up." (C1/S33/L1<sup>0</sup>)</p>	<p>"...throughout the whole course my confidence has improved and my ability to find stuff out and be able to perform tasks ... seems less daunting, whereas in year one and year two you find out all the things that you didn't know and confidence drops [laugh] as you progress; but I feel that improved with feedback from placements and exams, so yes, I am ready to be a qualified physio and be safe and hopefully effective." (C1/S41/L10+)</p>
<b>Case 3</b>	<p>"I definitely put that [high] expectation on myself, definitely with regards to my first placement because it was musculoskeletal outpatients which you're either into or you're not and I'm not and not being interested in it and coming in at the third year feeling that I hadn't brushed up those skills in quite a while and thinking now I've to perform at a certain level even though I've never had the chance to perform at a lower level. I definitely put pressure on myself, but it was positive, it went really well..." (C3/S9/L1<sup>0</sup>)</p> <p>"...hard working is a big thing, I prepared a lot and I was willing to ask questions if I didn't feel that what I was doing was correct, or if I was at all unsure, but there are a lot of transferable skills...I had developed that I was able to draw on; just being able to communicate with patients, I definitely drew on experiences and I worked with one gentleman who had a sore shoulder after a fall, he had brain injury so his mother brought him to the appointment and I'd completed reflections around communicating with neurologically impaired patients so those skills were usable in the situation..." (C3/11/L1+)</p> <p>"...I was pretty motivated, another of the lecturers said at the</p>	<p>"... [On placement] I was told that I did well, but it was a learning experience in that it confirmed MSK didn't feel like an area of interest, it was probably the subject, I just prefer the acute environment. There were things about it that I found incredibly frustrating, you're working so hard, some people don't show up and they don't realise how busy you are; and people telling you to your face, "so did you do your exercises?" "No", "Why not?" "Couldn't be bothered." and everyone complaining about waiting times "oh god, it was ages before I got to see a physio" that's because people don't show up; and I found people could be so passive and I found that very frustrating...we were attached to two surgeons, and the first thing you would ask someone would be "so do you know what they did" and the answer 90% of the time was "no, not a clue" and you'd think "why did you sign the consent form? why did you allow them to give you a general anaesthetic?" I learned so much from that..." (C3/S11/L14<sup>0</sup>)</p> <p>"... [second semester year 3] It was quite horrendous, I don't know how it could be done differently, because it's not like there is a time of the year when there is nothing to do where you could move work across..." (C3/S35/L1<sup>0</sup>)</p>	<p>"...there was probably a week where people were a bit "what are we supposed to do here?" as part of the learning experience you figure out for yourself, do it for yourself and then getting the recognition was a good experience; and it's exactly what we should be doing, it's a decision-making presentation...and I realised the whole thing was one gigantic exercise in reflection, drawing everything together..." (C3/S19/L1<sup>0</sup>)</p> <p>"...what I do [as reflection] it's very similar to the 'Kolb Cycle', but I just wouldn't call it 'abstract conceptualisation', I'd call it 'just having a think' and if there was more plain language, it's sometimes isn't approachable for something that is quite natural, all you're doing is thinking about something and you've probably thought about it at length and really the final part is documenting it and consolidating it and recognising it in a more sort of tangible form." (C3/S45/L3<sup>0</sup>)</p>

	start of the year that "you don't really have free time you just have time when you're not in university and make the most of free time" and I think I did that from the start to be honest..." (C3/S17/L1+)	"...even the negative experiences worked out as challenges, I wouldn't say there was anything that was really negative, there were times when we were let down by organisational factors, there were times when it was just busy, but I genuinely don't think that I could take anything negative from it ..." (C3/S63/L1 <sup>0</sup> )	
<b>Case 4</b>	"...I never really used the library before until third year not because I didn't take my assignments seriously it's just because that third year bubble and everyone doing dissertations I thought "why shouldn't I go to the library as well?" and I realised this is where I should be working, actually have people working all around you, that kind of motivated me to keep working, keep my head down. (C4/S15/L1+)	<p>"...it has been hard work-wise, it's been a lot more to juggle than the other years and I don't quite know how that's been because we haven't had as many practical exams, but we've had two presentations, it's been demanding assignment work which I'm not really very comfortable with, it's not my strong point, but I've really enjoyed my placements this year they've been amazing..." (C4/S5/L1<sup>0</sup>)</p> <p>"...the pressure gradually increased towards dissertation and then because other courses were doing their dissertation at the same time, everyone was feeling that third year bubble of stress of dissertation; and when I handed it in we didn't get much breathing room because it was straight on to placement and then doing assignments as well as the final presentation; the last two months or so has been really intense and really hard work so it's gone very quickly..." (C4/S11/L4<sup>0</sup>)</p>	"...three years goes so quickly and you have to keep up with it; looking back at the materials from first year and second year I realise how much I have developed and how much I have changed so that expectation there has changed but so have I..." (C4/S17/L12+)
<b>Case 5</b>	<p>"...it was balancing time I struggled with while I was on placement, I had the retake exam so that was a bit of a struggle, but again it was just pass it and move on from it, which I did. I didn't like the first semester, I had loads going on in terms of this retake and placement and third year assignments and then we were in second semester and we were bombarded..." (C5/S11/L1<sup>0</sup>)</p> <p>"...we had all of Christmas to do them [semester 1 assignments] if we were 'last-minute Larry's' [laugh]. The presentation was alright, it was just cracking on and getting the essay done, but it wasn't too bad, but it was just second semester, it was everything all at once." (C5/S13/L1<sup>0</sup>)</p> <p>"...my organisation has improved, I've really pulled my finger out this year and if I come out at the end with a third, I know I've put my all into third year, I really have, I haven't messed around, I've done the work, my organisation skills have improved so even though second semester was a whirlwind I just cracked on with it, got my head down." (C5/S15/L1+)</p>	<p>"My dissertation, I was quite disappointed with when I got it back cos it didn't reflect how much work I'd put into it, I really worked my socks off for that dissertation, so I was a bit devastated actually when I got it back, I kind of was expecting a bit higher, so that was a shame, but I'd already got a job by the time I got the dissertation back, so a pass is a pass in the grand scheme of things." (C5/S15/L5<sup>0</sup>)</p> <p>"...we get a mark back and we don't really have time to look at it, we've just got so much work, we've just worked the whole way through; and you hand in one assignment, take a deep breath and start the next one, it's just we've always got something and then we're on placement again and we had the essay and presentation to prepare for so that was a challenge in terms of organisation and time management but you know I'm here, I've done it and I look back at all the stress and think I'll never do it but we always do, you always manage to get it done, all of us do, we all panic about how much time we've got left to do it but at the end of the day we all do it and we all get it done." (C5/S19/L1<sup>0</sup>)</p> <p>"...when the stress hits, when the realisation hits, you just do</p>	<p>"Not ready at all [for year 3] the [elective] was like a holiday as well as a placement so [I] was relaxing so I was thrown in again at the deep end. First year you come on the course and you get thrown in at the deep end, coming back into the third year I was doing the same all over again, having to revise things and I had one of the exams to retake from the second year so that was additional pressure on top of everything else; and it was just a bit of a rocky start to third year but I managed to pass it..." (C5/S3/L1<sup>0</sup>)</p> <p>"...when I picked it [dissertation] up last week I was not getting upset when I was looking at it, but I was winding myself up cos I thought "that's a stupid mistake I should have done that or I wish I'd done this" and then thinking "but you've only got 6,000 words you can't do it all" so I just put it down and thought 'it passed' and that's the main thing, although I really should look at it, but it just winds me up now [laugh] I've put so much effort into it and came out with 44 so I just put it to the side, it passed, it's out the way. (C5/S17/L1<sup>0</sup>)</p> <p>"I wish I'd pulled my finger out at the start, I feel like I've let myself down a bit, especially in second year because I knew</p>

		<p>it, if that makes sense; last year and first year everything was last minute, whereas this year I have really worked on it, used the time wisely..." (C5/S21/L1+)</p> <p>"...It's been a really good course, it's been a hard course and that's a good thing, I wouldn't want an easy course I want something that's going to challenge me and take me outside my comfort zone. I've had quite a lot of setbacks along the way that was needed, to be shocked and you need a shock to the system to make you realise what you could give up." (C5/S33/L10<sup>0</sup>)</p> <p>"...the people that I'd lost, [friend] he just wanted me to do the course and I know if I'd dropped off he would have been cursing me [laugh] and recently I lost my grandma, just over a week ago, and I haven't thought about it because I know she wouldn't want me to, she wouldn't want me to put anything back, she would want me to finish this course; and so that's driven me recently, is knowing that if I put everything back she would absolutely hate that and I've seen the end result, knowing what you could have at the end, I've got a job now, I've done it." (C5/S35/L4<sup>0</sup>)</p> <p>"...I've stuck with it and that, for me is a big achievement, the amount of setbacks that I have had and I'm still here, I've got a job at the end of it, I've grown so much as a person..." (C5/S39/L6+);</p>	<p>second year was going towards our final degree and I really should have knuckled down then, but it's taken me until third year to do that; so I'm a bit disappointed that I didn't, but we all have to learn new things." (C5/S37/L1-)</p>
<b>Case 6</b>	<p>[On] placement I'd got a few light bulb moments so I felt this is what I'm going to be doing in a few months hopefully, it was a brilliant placement I loved every second of it and I got the opportunity to manage three different wards on my own, manage with medical boarders as well, so it gave me the time to prioritise and use my time management skills effectively. I got really good feedback and they helped me really well preparing for my main interviews..." (C6/S3/L58+)</p> <p>"I feel in terms of getting stuff done I have [improved organisation] and I've tried to do them as best I can..." (C6/S9/L1+)</p> <p>"...no one wants to revise over Christmas but I didn't not want to because I wanted to do well, so I tried to do as much as I could before I went home and just have bits and pieces to finish up at Christmas and afterwards..." (C6/S9/L10<sup>0</sup>)</p>	<p>"...we had to do a presentation and the other essays it was like chopping and changing your workload, but I got everything handed in on time which I was really chuffed about and passed my presentation, I got 60 which I was really happy with and passed my assignment but even though I was really happy I passed I was a couple of percent off getting 60, I thought "you just need to push and get as good as I can in the others"; I handed my dissertation in and felt quite happy about it, I did the best I could regarding how much of a struggle I felt I found it; when I got my results I was happy I'd passed but felt my feedback reflected how hard I'd found it; I could have done a bit better, but then it shows how hard I found it so it's fair enough..." (C6/S3/L35<sup>0</sup>)</p> <p>"...in terms of getting stuff done and handing it in on time, I feel I've achieved that, I have handed in on time I've not missed any deadlines, but I've still been able to put as much in as I could on placement as well..." (C6/S11/L2+)</p>	<p>"...that dissertation comes at you before Christmas and its gives you time to mull things over, but maybe before Christmas I could have had more of a plan for my dissertation because that would have made me feel better once I'd done all these essays, to get going with my dissertation sooner, just to have more of a set plan I would have felt more confident..." (C6/S9/L14<sup>0</sup>)</p> <p>"...I got to do post-op, pre-op, to see surgery and anti-natal, post-natal clients, hydro, the opportunities on that placement were endless; I don't think I could have asked for a better one because it was a good rounded final placement, I got to do respiratory, MSK and draw on lots of different things, manual therapy, education, advice, it was really good..." (C6/S13/L13+)</p>

	<p>"...I feel I've achieved, I have handed in on time, I've not missed any deadlines, but I've still been able to put as much in as I could on placement as well..." (C6/S11/L2+)</p>		
<b>Case 7</b>	<p>"...I had a lot of work to do on placement, it was different from any other placement that I did and I did really enjoy it, it was working in the community and it was full-on as well, they wanted me to do some real work behind [practice] and I was happy to do that, cos we were a good team. I had to do some work on multi-disciplinary team working and discuss it and I did the same with the Tinetti outcome measure and I had a look at assessment, how it differs between the community and in hospital, so that was work in itself for me." (C7/S27/L5<sup>0</sup>)</p>	<p>"...we went out on placement I did a neuro placement which was full-on, it was so interesting and I found it tiring because it was early, we were on our feet all day, it was quite physical and then I was coming home and I had work to do as well on an evening; but I really got so much from that and then coming back in, I didn't manage my time appropriately, getting it done and getting it sorted is really important because [of] added pressure of everything with life and university..." (C7/S7/L1<sup>0</sup>)</p> <p>"...I had the worse Christmas ever, because I had those [assignments] and the thought of doing them, suddenly I was suffering from anxiety in the last year because the dread of having to start and I had put things off, I remember someone saying "don't put it off over Christmas", so I did start..." (C7/S23/L1<sup>0</sup>).</p> <p>"...I'm definitely resilient and I just get on with it, even though I have had bad times over the last three years. I can adapt to change as well that's really important. I'm just learning in life in general, although I'm an older student I feel like I've really grown up in the last three years and that experience I would never have had..." (C7/S39/L1+).</p>	<p>"...it's been a good lesson for me, that your life isn't just how you set off, you can change and you can find new interests, I do like the constant learning, but that's not something that's new to me, within my sport I was always learning and constantly having to change and develop so that's something that I accept is going to be part of my life forever..." (C7/S11/L2+)</p> <p>"...I was going into the unknown when I was doing the dissertation, but so were most people. We have learned how to do a literature review and what makes a dissertation and I wanted to do it on something that I was questioning and something that I'd seen myself in two different placements, completely different views on electrotherapy, so it was relevant, so I did spend a lot of time and it was a real interest for me, I was so disappointed with my mark because I just thought it was my best work, obviously I have to have a look over it and then say this is why you've got this mark and a mistake you've made here, may be I've just made a dreadful mistake?" (C7/25/L1<sup>0</sup>)</p>
<b>Case 8</b>	<p>"...I got really nice feedback at the end of placement but I still feel that I could have done more it could have been better but they really praised me as to how I stuck at it and did well with all the stress and the work and things going on they really praised me for that and they gave me some good feedback but I could have done more and could have contributed more..." (C8/S9/L7<sup>0</sup>).</p> <p>"...throughout school and uni I've never been somebody who works up to a deadline well, I prefer to have things done and I think that's why I've been so stressed this past few weeks because I've had deadline after deadline. I've managed it as well as I can, but I've always wanted to do the best I can in everything, I wouldn't do something just to pass it I try and do the best I can, knowing that I'm potentially capable of more than what I've given in the past few weeks has hindered me a little bit, and it has been a balancing act..." (C8/S17/L1<sup>0</sup>)</p>	<p>"...the second half of the year I've not enjoyed how it's been structured...especially the last couple of months there's been too much going on all at once..." (C8/S7/L11-)</p> <p>"...the way it [semester 2] was structured I don't feel it's enabled me to give my best to the placement, things going on at home haven't helped but there's been days when I've gone into placement and I've been a bit distracted and I've been stressed and not done myself as much justice as I could..." (C8/S9/L3-)</p> <p>"...I've managed it about as best as I could, I was focused on dissertation, I handed the dissertation in and had a week to prepare for placement so that became my priority, then I had three weeks doing the essay, so that then became my priority; then three weeks of doing presentation. I don't think I'd do it any differently, I couldn't have started any earlier because I had two other assignments, so I think I've managed it as well as I could and I got through it</p>	<p>"...I'm a terrible person for worrying in an academic and a personal sense, overthinking things, so if something goes wrong I'm always thinking, "could I have done that", "should I have done that", "what if I'd said that", I do over-analyse things and that probably doesn't help me in terms of stress, I do get myself worked-up, but using my parents as a vent they do calm me down and reassure me that I am actually doing not too bad, not as bad as I think I am..." (C8/S33/L1<sup>0</sup>)</p>



	<p>“...determination is a massive part of it. I do things to be the best I can be, I don't just go into stuff to pass it or just to do ok and that's helped me get through; I've always been determined, even if I've not felt on-top-of-the-world I've always tried to give my best to everything that I do; and enthusiasm, I really enjoy the profession of physiotherapy and wanting to become a physio is driving me through the last few weeks and thought of being a qualified physio is what's really helped me...” (C8/S19/L1+)</p>	<p>somehow...” (C8/S13/L1<sup>0</sup>)</p> <p>“...the fact I have managed and I've got everything in on time and however much I've been stressed I've not had a breakdown, not yet anyway touch wood, I think I've managed myself well and leading into getting a job and managing a ward and managing my own practice, I'm really confident...” (C8/S15/ L1+)</p>	
<b>Case 9</b>	<p>“...That final presentation a week after the placement was my worst mark, but I just ran out of steam by then. I came in every day, I was working in the evenings after placement, I just got overawed by what you had to do, I felt I had too much to do, too much to include and difficult to pull things out to illustrate what we were looking for in the presentation...” (C9/S49/L2<sup>0</sup>).</p>	<p>“...I found it [CP5] quite challenging, but that's often the case for that [MSK] environment anyway, I still enjoyed [it] but another reason was personal circumstances because we'd just had another baby so tiredness played a factor, but I still got a lot out of it, got a lot of really good tips and good information, but not as much confidence from it, which is probably no bad thing because it made me realise that you do need to put a lot of work in...” (C9/S7/L4<sup>0</sup>)</p>	<p>“...I had an advantage over some of the younger ones, I think you have quite polar views when you are younger, so it's a bit more difficult to appreciate there's not necessarily a right way or a wrong way to do things; there's different opinions and different ways of looking at the same thing; that was beneficial for me to have a bit more experience, that's something I found really interesting but it was noticeable that some people did struggle or [were] not as appreciative of that view point or different side of the story...” (C9/S13/L1+)</p> <p>“...I've always been that way inclined [linking theory to practice] on placements, having the knowledge makes me more aware, before I speak to somebody, how to integrate it. The clinical reasoning aspect is more evident from that placement [CP6], it was something that I [had] to look back on and work-out what I did to get to this decision; you could see that I was using it; it does boost your confidence that you're soaking things up from the lectures, practical's and seminars...” (C9/S19/L2+)</p>
<b>Participants</b>	<b>4. Caring/Altruism</b>	<b>5. Interpersonal relationships</b>	<b>6. Attitude to learning</b>
<b>Case 1</b>	<p>“...my communication skills have been consistent throughout and I've had the opportunity to use them in a variety of hospital situations and I guess with my dad's health and experiences I've had, the experience of being like a visitor and I guess a patient at some point, but I've seen other points of view, I know physios have a reputation of...being a 'physio terrorist' but it's getting that balance [taking] different points of view...” (C1/S41/L1+)</p> <p>“...the more you get used to it [placement] it just felt like enjoyment in terms of proving that I now have the skills to help people to improve...” (C1/S47/L13+)</p> <p>“I find it nice and motivating to see people and they've improved and I've helped to achieve [that] or, I've come into a placement and [patients] they've gone from A to B when I get</p>	<p>“...I did feel ready for the expectation [to be working at a qualified level] but it was acute paediatrics so my confidence wasn't too great because I didn't know how to handle [a] well-baby [never mind] a sick little baby; but I had a lot of guidance, help and support and the educators really guided me, they were impressed with some of my clinical decision making and I managed to improve on management skills, I was able to time manage and case-load manage...” (C1/S35/L1+)</p> <p>“...I've had a lot of help and support and it's better than what other people have had on other courses. I feel I've been very lucky it's perhaps because everyone is a health professional by trade and understand the effects of illnesses, so I feel I've had quite a lot of support; and support that I haven't taken but it's been there and offered...” (C1/S65/L1+).</p>	<p>“...I've had quite a few new neuro opportunities so I felt I could draw on things we're learning within the clinical decision making module and other neuro placements and bring them all together to a higher level and I felt my confidence grow...” (C1/S15/L1+)</p> <p>“... [on] that placement specifically there was a lot of new concepts the physios were involved [in], they [patients] needed a lot of visual type rehab, so it was new for them [educators] and they obviously didn't expect me to have been taught it and use it in placements or at University, so it was a good learning opportunity but when it came to facilitation they were able to quiz me and get some sort of treatment plan out of me...” (C1/S17/L1+)</p>

	<p>them and I see them improve that's probably the main thing..." (C1/S49/L4+)</p> <p>"...I like helping people and of other professions you physically help people, you don't help people to compensate as much as OT would; or in nursing you care for people but you don't have the tools to improve and challenge them. I do find it difficult when you have to stress people when they're not [well] or with the paediatric cases when a six-year old doesn't want to sit on the edge of the bed but you have to [encourage them] I found that quite a challenge but you know that you do things for a wider, more important benefit..." (C1/S67/L1+)</p>		
<b>Case 3</b>	<p>"... [On placement] there were things that I found incredibly frustrating, you're working so hard, some people don't show up and they don't realise how busy you are and people telling you to your face, "so did you do your exercises?" "no"; "why not?"; "couldn't be bothered." and everyone complaining about waiting times "oh god it was ages before I got to see a physio "that's because people don't show up"; and I found people could be so passive and I found that very frustrating that the first thing that you would always ask someone would be "so do you know what they [surgeons] did" and the answer 90% of the time was "no, not a clue" and you'd think "why did you sign the consent form?"; "why did you allow them to give you a general anaesthetic?" I learned so much from that..." (C3/S11/L19<sup>0</sup>)</p> <p>"...I did definitely get a kick out of respiratory, it's funny it's like my logic for this is the exact opposite to neurology, but respiratory has that wonderful cause and effect, somebody is unwell and you do something and they get better and a lot of the time it happens virtually instantly; I had a patient literally change colour in front of me and I was "oh you've fixed him, that's great"; but then neurology is the opposite end, it is so long-term and it's "right let's strip this right the way back and start from the start", but that's the reason why I primarily would be interested in neurology because there's the most balls in the air, cos you [also] have a respiratory aspect and musculo skeletal aspects to it..." (C3/S73/L12 +)</p>	<p>"I had meetings with [named staff] and I had meetings with [project supervisor] of course and I ran some of my thoughts past [another named member of staff] given it was her area of interest so I had rough ideas where I was going..." (C3/S25/L1+)</p>	<p>"...at the end of the dissertation I definitely felt confident in my opinion on subject matter. I really had examined the evidence-base and had come up with an opinion and justification of why I think things should be done the way they did and I could have argued the point if I had to; it was definitely a learning experience obviously from the studies skills perspective of things as well around managing your time, how to engage in the process." (C3/S29/L1+)</p> <p>"... [the dissertation] was definitely a good way of consolidation all of that, in the end I felt I had a reasonable opinion, that's what you want to arrive at, a valid defensible opinion on whatever the subject..." (C3/S31/L1+)</p> <p>"...I was pointing out issues around the evidence based for Maitland techniques and when I saw who I was presenting to I thought this isn't going to go down well and sure enough the first question in the viva was "what's your issues with that" and I was just saying the evidence it's just not contemporary and we're being taught that evidence should be contemporary today, so it's not that it doesn't work, just that I think the evidence-base could do with updating and I also I had criticism around reflection, there is no question about the importance of the reflection but I just felt that sometimes that it can be really over cooked, that there is a real danger of it being made into a chore rather than recognising it is actually a natural personal process..." (C3/S43/L4<sup>0</sup>)</p> <p>"...I'm very keen for rotations to just ground myself and consolidate everything a bit better because that's the nature of placements you're not so familiar you haven't got this sort of self-efficacy about what you're going to do so at the start,</p>

			you're a bit slow, but as you get more confident and you get more familiar by the end of it you are getting into it and then it ends, so you can only progress so far..." (C3/S73/L2+)
<b>Case 4</b>	"...it's a great career to have; you get to have such an impact on people's lives physically, as well the emotional attachments. I've had patients that I have got very attached to, which I know you're not supposed to do, but you can't help it, and you're in situations where it is emotional and I find that really rewarding, and it develops you as a person as well..." (C4/S29/L9+)	<p>"...my parents have been my rock constantly throughout the three years, but I think with friends and family support and the staff support at the university has been really good; whenever I've been in hard times you feel you can contact a tutor, staff and that kind of faith within the students is really comforting and knowing that the staff do actually care; in university because our course is quite small you do get more of a connection, it's a really nice atmosphere, really nice university actually to be in and be part of, it's quite a strong team spirit..." (C4/31/L2+).</p> <p>"...the staff support at the university has been really good, whenever I've been in hard times you feel you can contact a tutor and that kind of faith within the students is really comforting and knowing that the staff do actually care; because our course is quite small you do get more of a connection, it's a really nice atmosphere, really nice university actually to be in and be part of, it's quite a strong team spirit..." (C4/31/L2+)</p>	<p>"I completely changed [study approach] I spent days in the library and I needed to because I did find with the dissertation it seemed very different from any other assignment; accessing the resources within the library I needed to do that in order for my assignment to have good evidence-base and so I completely turned around [study approach] I just couldn't concentrate at home, I found I'm too easily distracted so the library was my place to be at that point..." (C4/S13/L1<sup>9</sup>);</p> <p>"...I've become much more independent with my work...I am more rounded as a person...the last three years has really taught me about life in general; so it's worth the challenges along the way because now I'm out the other side and it's a very exhilarating feeling, it's worth it..." (C4/S25/L1+).</p> <p>"...the areas of respiratory and oncology I have really enjoyed but for now I don't really know where I'm going to go. I want to do rotations so that I experience more areas, I've been lucky enough in my university placements that I have had a diverse selection but at the same time those were only tasters 4 weeks, 6 weeks so I'd like to go back and do my rotations and you never really know where you are going to end up until you're in the system and following the work that needs to be done. I am quite open-minded; I have those areas which mean more to me from a personal aspect..." (C4/S35/L1+)</p>
<b>Case 5</b>	"...I was very naïve coming on to the course I didn't really have a full understanding of physiotherapy, whereas now it's such a huge area and physios do play massive roles in people with loads of conditions and it's opened my eyes, I came onto the course having a set idea where I wanted to go and now I've got no idea, there's areas that I enjoy more than others, but you need to experience every area of physio before you decide where you want to go." (C5/S41/L2+)	<p>"...You just never think of children being that sick and then to be in an area where children are that sick for six weeks, they just expected a lot of you. I do understand we are third year, we are coming towards the end but I've never had babies and...I've never picked a baby up, I've never cuddled a baby, they just expected you to want to pick children up and know how to pick children and know how to turn them, it just wasn't for me at all and I didn't feel I had the support that I should have had on that placement, so it has put me off paediatrics which is a shame because not all paediatric placements are going to be in such an intense environment." (C5/S5/L3-).</p> <p>"...mental health community I really enjoyed it...a combination of having such a nice team, that really helps if you get along with the people you are working with, you have a more enjoyable experience and I got on so well with them</p>	<p>"...it was [box ticking] it was just get through it and pass it. I couldn't think of anything worse than having to do another placement, I've failed quite a bit and it was just "ah not a placement as well", so it was just about ticking the boxes, meeting the criteria they wanted me to be meeting, putting on an act, it wasn't me at all, which is a shame cos I would have probably enjoyed it." (C5/S9/L1-)</p> <p>"...I do feel I'm ready [to qualify] ask me that in second year and I wouldn't want to go anywhere [laughing] but now, I feel I'm ready, I need to be given the independence, there's always someone watching over you and I feel I need to be an autonomous practitioner and do it on my own, I need to make my own journey now, so I do feel like I'm ready..." (C5/S31/L1+)</p>

		all, they were all welcoming and they looked at me like a team member, instead of a student, which was really nice, I had a great time and I didn't feel stressed, I felt quite relaxed and that helped a lot, having so much work...I've been blessed." (C5/S23/L1+)	
<b>Case 6</b>	"... [Physiotherapy] can affect anybody, it's not just for somebody who's got a sports injury, or somebody who's got a neurological problem; it can literally help anybody and change somebody's life so much..." (C6/S15/L8+)	<p>"...I really didn't have a clue what I wanted to do for my dissertation; it was a proposal for a research study which I didn't feel very competent on at all, I was really apprehensive, but with my supervisor I felt that she was really important in giving me an idea of what I wanted to do, what was involved, she settled me down thinking of ideas and that was really important to narrow my vision as to what I wanted to do..." (C6/S3/L22+)</p> <p>"...I started placement [CP7], my educators were brilliant, planned out my learning outcomes and I felt I was able to do my [academic] work around that placement, so I got my essay handed in on time and prepared for the final presentation quite well..." (C6/S3/53+)</p> <p>"...my educators on my final placement really helped me because I was disheartened [by missing the Band 5 post by] two points; but they [said] "you've gone about it the right way, they know your name"" (C6/S5/L1<sup>0</sup>)</p> <p>"...light bulb moments on my final placements were making me realise that I do know stuff and my educators gave me such good feedback that it gave me the confidence to think I do want to be a physio, I'm going to be an alright physio and have confidence in my own ability..." (C6/S5/L4+)</p>	"...I had an idea of what different areas [there] were because I'd done work experience in hospitals, but I didn't realise the amount of research, how much that evidence-based practice was important; so that had a huge impact, to realise that you need evidence to justify why you are doing stuff..." (C6/S15/L1+)
<b>Case 7</b>	"It was demanding being in intensive care that was shocking to me. I was looking after a patient with an assistant and the heart rate was racing, we were trying to move the patient, she was semi-conscious and I didn't panic, I remember thinking I need to take charge of this because, although I was the student I was leading. Things like that made me realise 'gosh you're responsible for this person at the most vulnerable part of their life' and it got to me a lot, I felt emotional for the people...I'm empathetic and that's good, but also the task itself was so massive, I was so impressed with the physios there; it was really demanding and I enjoyed it, I got a lot from it I was just really sad all the time." (C7/S17/L1 <sup>0</sup> )	<p>"I made a conscious effort when I first went into the placement to be confident and assertive. I did a lot of multi-disciplinary team (MDT) work where I was referring patients through GPs, when I was writing a treatment plan, I discussed it with a cardiac nurse, I understand how MDT works, but being part of it and getting on with that came across quite well with the educators, they and everyone else in the team were just forgetting I was the physio student and just thought I was working there so that was quite good." (C7/S29/L1+)</p> <p>"...[on CP7] they were older physios, there were some young ones and OTs they were mostly older and I think they probably appreciate that I'd had a life before, whereas when I've worked in a hospital you feel a little bit downgraded</p>	<p>"...what's helped me is my last placement and understanding that I don't need to know everything at once, but if I work within one area I can get really good at it, that's probably one thing that would probably put me off wanting to do a rotation is I like to throw myself into that [one area] and get really good at it quickly..." (C7/S15/L1+)</p> <p>"...my love of learning or getting something right; when I used to do judo...I have a real feel and eye for technique, so like skill acquisition, you do it when the pressure's on...because of the training you've done and the work you've put into it, you get a massive buzz; and coming here, learning something and knowing that I've processed it and understand it [I] get the same buzz from it, so it's part of me, I just wish</p>

	<p>"the stuff that they were doing was, I don't know if it's unique but when I saw them actually walk someone who was unconscious, I thought how important that is. Getting into physiotherapy I've experienced so much that I would never have known. [I] could go through life and not know that that could be done so, I've really valued that experience, I just found it sad that life can change so quickly, but in the same breath you can have a massive difference. I saw someone one day who just looked like they were not going to survive and they worked with them and within a week that person was, not back to normal but was themselves again." (C7/S19/L1+)</p> <p>"...I worked with that patient quite a bit, a lot of rehab on one-to-one, I just I kept looking back to see what he was like when he was in intensive care, to think he had no chance he was fitting, he'd had a stroke and there was nothing there and then I watched him get discharged with his wife and he walked out, he walked functionally, just had a few problems with his memory, you probably wouldn't leave him boiling the kettle [laugh] but everything else, he was just great..." (C7/21/L1+)</p> <p>"...I loved [CP7] because there were people who were in desperate need of help within their own homes, and it was really to try and look after them safely in their own homes and to stop getting readmitted. Some people had fallen, so they would get referred into the team and you were kind of like a SWAT team going in. I understand how people live and problems they have, but still it was an eye-opener for me going in and making sure we've got a care package together; and it was amazing to see the difference in people within a couple of weeks even. I still have in my head a guy who lived on his settee, didn't move for months and I still think of him, I think "oh that poor man", but it's understanding how people want to live, you're there to give them care and attention, but they want to live differently." (C7/S33/L2<sup>0</sup>)</p>	<p>because, the physios you are working with are probably a bit younger, I don't think they've got the skills to be able to communicate efficiently with students, whereas in community there was a bit more respect for me as a person and then it allowed me to get on with my job." (C7/S31/L3<sup>0</sup>)</p> <p>"I remember the lecturer saying "try and get yourself in a group"; I must admit I'm friends with everybody, but people were staying to do something and I'd have to shoot off. I saw one of the girls sitting with her papers and I thought I bet she's gone through that with a group of girls, they'll have all run through it, they'll all know what they're doing, probably it just takes more time that way, but you know I have friends here, but I haven't done any study with them to be honest..." (C7/S45/L1<sup>0</sup>)</p>	<p>my brain could hold more information, but I don't know if that's a sign of my life and my age..." (C7/S41/L1<sup>0</sup>)</p>
<b>Case 8</b>	<p>"I've really enjoyed it, I love being on placement, I love the feeling of helping people, I don't think you get a better feeling if you have a patient and you can get them back to something that they want to do, or you can get them up and out the door. I don't think there is a better feeling I've found yet that you can replicate where you're helping a patient who is ill and getting better that's a really big thing. I know I want to be a physiotherapist, I don't know what type of physio I want to be</p>	<p>"...I got really nice feedback at the end of placement but I still feel that I could have done more it could have been better but they really praised me as to how I stuck at it and did well with all the stress and the work and things going on they really praised me for that and they gave me some good feedback but I could have done more and could have contributed more..." (C8/S9/L7<sup>0</sup>)</p>	<p>"...first half of the third year was really good, very positive, I enjoyed coming into university refreshing my skills, mandatory training, a bit of teaching then doing 6 weeks' placement which I really enjoyed..." (C8/S7/L1+)</p> <p>"...getting a job and managing a ward and managing my own practice; I'm really confident because you know that you're going to do your work and you're not having to go to the</p>

	<p>yet and that's part of the reason why sport is not for me because I want to do my rotations and see what else is out there, what else I can experience, what I can do, but I know that I want to be a physio, definitely..." (C8/S21/L1+)</p> <p>"...physio is not a job you go into to earn the money, it's the satisfaction and the giving something back and being able to help out is something I've enjoyed from an early age...I just enjoy helping people, I like it..." (C8/S27/L1+)</p>	<p>"...the workload is still a lot and the issues with home were exacerbated by me being up in the uni house on my own so I didn't have family to talk to and I was just letting it brew on an evening, so that was getting me down a bit; if the family were living up here I could have stayed at home, done placement and probably managed it a little bit better..." (C8/S11/L1-)</p> <p>"...I have a persona of being really confident, but I do get quite negative quite easily about myself; and my parents have been massive in helping to boost me back up and if I've had a poor mark they'll just tell me to go again, or if I do something wrong, or say something stupid, or something happens they'll always help me out..." (C8/S35/L1<sup>0</sup>)</p>	<p>library afterwards; that could change with future studying, obviously you need to develop yourself and do your reading at home..." (C8/S15/ L4+)</p> <p>"...I've experienced quite a lot in physio, but there is still more that I want to do; I'd like to experience amputee, I'd like to do hands, burns and plastics, I'd like to do trauma, I'd like to do stroke; I couldn't tell you where I want to be, all I know is I want to have a physio job and carrying on doing more rotations..." (C8/S39/L2+)</p> <p>"...I have been prepared, after my second to last placement I was six months away from graduating and nowhere near being ready to be a physio; but having done my last placement, I feel like I'm there in terms of the core skills of physiotherapy and communication, everything is in place for me to be a good physio and I've been prepared in that sense, it's just a question of getting more knowledge as and when I need it and depending on what area I'm in..." (C8/S43/L2+)</p>
<b>Case 9</b>	<p>"... [Last placement-CP7] was a nice way to compare and contrast the two aspects [hospital and community] between similar patients [stroke]. I was able to follow patients from initially coming on the ward after a stroke, through discharge and through community physio as well; so a nice overview of how physio worked and improved people's conditions it was quite good I got a lot out of it..." (C9/S45/L8+)</p> <p>"...when I first started I wanted to do it [physiotherapy] because I wanted to make a difference, I wanted to help people, even now I've got a much more practical outlook, I've got a family which I started having when I started the course, which I didn't have when I actually left my job, so I still think about it as a supportive role..." (C9/61/L3<sup>0</sup>)</p> <p>"...without doubt that's still a big factor, without a shadow of a doubt, and that's why I'm still really keen to go into the NHS as opposed to other aspects of physio and have more placements. The placements I've enjoyed more are the ones where I've spent more time with people and you can see the benefits you are making to their lives and the families lives so that's still the area that I want to try and fit myself into; but it's less of an emphasis if it meant you've got a job, which I probably wouldn't have felt like four, three years ago..." (C9/S67/L1+)</p>	<p>"...I did get good support [ on CP5] as far as the training and time put aside, but a little less encouragement than on previous placements and a little less interaction, I think the department was a little understaffed so there were a few grumbings..." (C9/S5/L2<sup>0</sup>)</p> <p>"...before a placement I'm always quite nervous and it was the amputee placement [CP6] I had, I enjoyed a lot; a small team, quite good as far as developing and training and very approachable and that gave me a lot of confidence..." (C9/S17/L1+)</p> <p>"...it's a procrastination thing, you're almost putting off doing the work by looking at one more article; it's something I was aware of, I went to see my personal tutor and he said get something written down, it doesn't matter if you don't use it in the end just start writing, so I knew what I had to do, it was just a case of biting-the-bullet and starting..." (C9/S39/L1<sup>0</sup>)</p>	<p>"...I could see an improvement throughout the six weeks [CP6] on an engagement level and on a skill level, because a lot of it was assessment and analysis...you start a placement...and you wonder how people spot these things [dysfunctions], whereas three or four weeks into it, it falls into place and you are able to assess people and work out how to rectify the issues, I think the six-week length of time for that sort of placement is definitely beneficial..." (C9/S25/L1+)</p> <p>"...I hadn't done any community placement beforehand so it does give you quite a good snapshot of it, the difficulties and the challenges in comparison to the ward based. [There is] obviously a lot more social things to consider, very good for multi-disciplinary team working, that was a lot more in evidence, so I got a lot more out of it, you can look back at it for personal statements [job applications] and I've been able to pull quite a few examples from that placement to illustrate what people are looking for..." (C9/S47/L1+)</p>

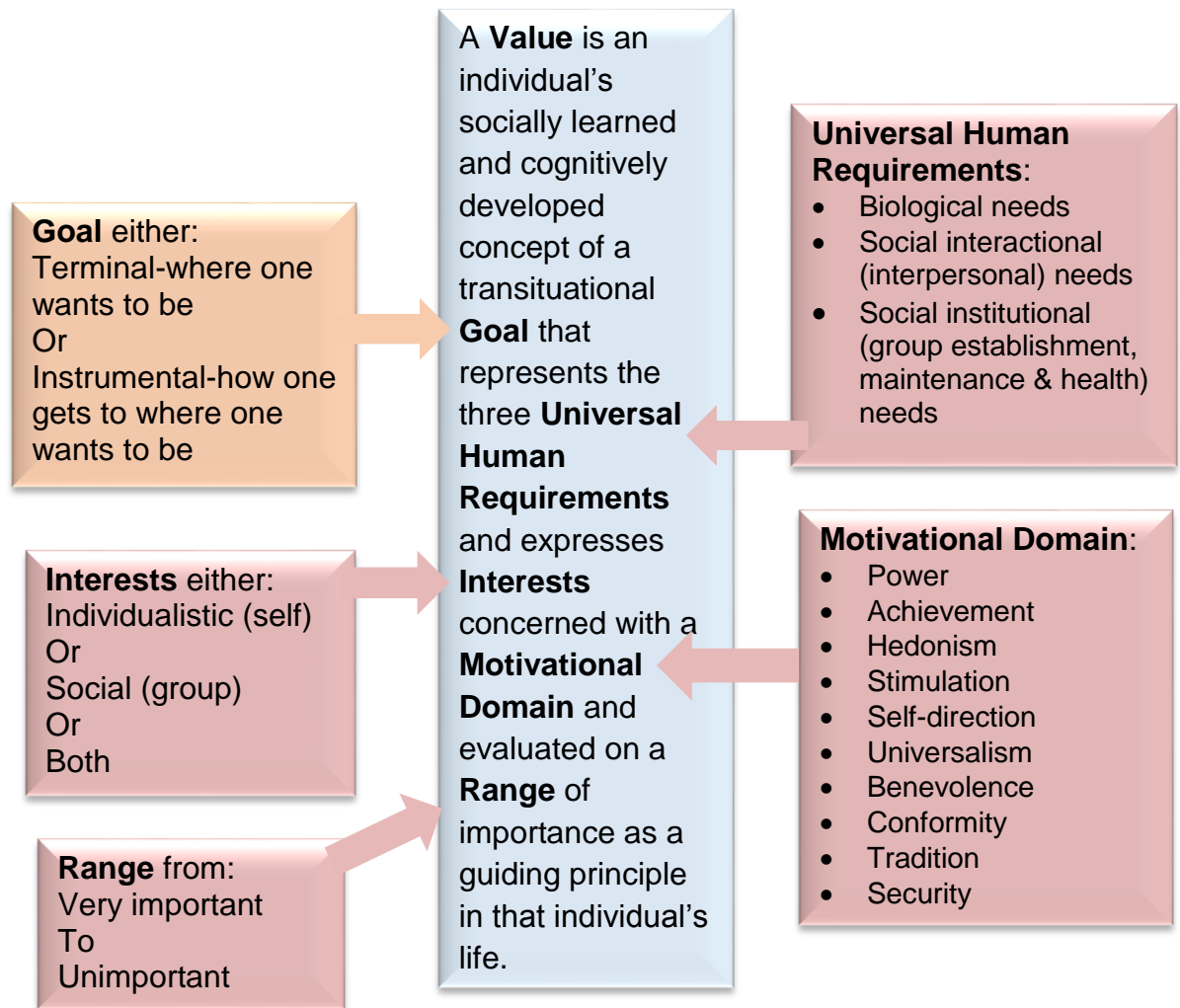
Participants	7. Attraction to Physiotherapy Identity
Case 1	"... [The degree] opened my eyes to what a physio is and the wider role of physio, their role within a multi-disciplinary team, it's gradually gaining more momentum and the importance is being recognised more; I expected there to be less assignments but you understand why, they are around patient centeredness and safety and this is important working in the NHS, you have to meet criteria..." (C1/S53/L2+)
Case 3	"...I do feel ready and dying to get stuck in..." (C3/S51/L4+)  "...the more I've been exposed to it the more I realise that it is a great job, it is a great thing that we do and hopefully it will be something that should get a bit more respect..." (C3/S65/L1+).
Case 4	"...this course has completely opened my eyes to what actually goes on in the health care system, how professionals work, team working and my area interest is cancer and respiratory which I wouldn't have thought physios were involved in at all until coming on this course; I don't recognise the person that I was whenever I came in to this course." (C4/S27/L2+)
Case 5	"...I'm ready [to qualify] ask me in second year and I wouldn't want to go anywhere [laughing] but now I'm ready, I need to be given independence, I need to be an autonomous practitioner and do it on my own, I need to make my own journey now, so I do feel I'm ready..." (C5/31/L1+)
Case 6	"...light bulb moments on my final placements were making me realise that I do know stuff and my educators gave me such good feedback that it gave me the confidence to think I do want to be a physio, I'm going to be an alright physio and have confidence in my own ability..." (C6/S5/L4+)  "... [You develop] a mixture of practical skills and theory in university and being able to go on placement and apply that; I feel well prepared and ready work in the real world and not be a student any more. I'm nowhere near being an expert in physio, but then I don't feel like I'm a complete novice either, I feel I'm in the middle somewhere. That's because of the course, it's given you the skills and knowledge you need to get a good level of competence in different places and the only way that's going to improve now is by spending more time in each area, do rotations and continuing to develop from feedback and continuing professional development to get better. The course can't give you anything else, you've got to do a bit yourself, you can't just expect to be a fantastic physio just because [you have] done this course, but it's really helped to develop me." (C6/S23/L1+)
Case 7	I wish I'd done it earlier, I'd put off for ten years I had my daughter; and I did judo and although judo was my full time job if I'd lived somewhere else and if I'd had a bit more support, maybe I could have done physio. I'll take that back I don't think I could have done a physio degree because of the time and it has to be all or nothing, I think having life experiences has brought new things to physiotherapy that you won't have if you go straight into it from school, but at the same time it would be an easy transition, so I wish I'd done it ten years ago, [instead of saying] I haven't the qualifications, I haven't got the time, I've got to work, I was a single parent, how could I give up a job, so I was really tied, so it just happened to be right this is my last chance and I'm going to go for it..." (C7/S43/L1 <sup>0</sup> )
Case 8	"...a good physiotherapist is what I'd like to be, I'd like to be someone who when I get a student they feel that they can come and talk to me. I don't want to be overbearing, let them do their own thing and make mistakes that's where I feel I've benefited, obviously not unsafe, but to do an assessment and get something wrong and they've given me constructive feedback rather than being slated; when I get a student I'd be able to guide them through it and give them a bit of my expertise and let them go away and do the reading and prep and have a go, then come back and talk through concerns, I like to think I'm quite approachable and happy to help and pass on to other people what I can..." (C8/S41/L1+)
Case 9	"... [Being a physiotherapist] it's the way you approach things, the way you are able to find out things and learn things, you're always aware you've got limited knowledge even if you have twenty years' experience, you need that ability to reflect and improve, the ability to soak up new information, new techniques and new approaches; you've got skills and knowledge, but also its aligning yourself with directions and policies in order to fit in the work environment; and to understand why you're doing that, it's a lot of things more of an attitude and ability to use that attitude when you're working..." (C9/S57/L1 <sup>0</sup> );

## APPENDIX 12: DESCRIPTORS FOR MCCREA & COSTA'S FIVE-FACTOR MODEL

Trait (Dimension)	Descriptors
<b>1. Openness to experience (or intellect, or imagination or culture)</b>	Curious, imaginative, open-minded, aesthetically orientated, sensitive to art and beauty, have a rich and complex emotional life, behaviourally flexible, non-dogmatic, willingness to be immersed in atypical experiences, loving, non-demanding
<b>1b. Closed</b>	Preference for facts and reality over fantasy, ideas or possibilities, tends towards conventional values, inflexible, not adaptable, dogmatic, authoritarianism
<b>2. Conscientiousness (will to achieve)</b>	Responsible, organised, efficient, scrupulous, diligent, associated with academic and vocational success, planning, persistent, purposeful striving for goals, impulse control, reliable
<b>2b. Unreliable</b>	Lax, disorganised, lackadaisical, irresponsible, lacks initiative, demotivated
<b>3. Extraversion</b>	Talkative, ambitious, assertive, warmth, gregariousness, sociability, active, tendency to experience positive emotions such as pleasure or joy, spontaneous, energetic, dominant, confident, happy
<b>3b. Introversion</b>	Quiet, lacks ambition, cold, removed, loner, passive, appears not to experience pleasure, joy, apathetic
<b>4. Agreeableness</b>	Friendly, cooperative, loyal, trust, sympathy, nurture, helpful, empathetic, able to inhibit negative feelings, more tolerant of others failings/transgressions, less aggressive, maintains relationships, altruism
<b>4b. Antagonistic</b>	Cynicism, hostility, callous, displays power
<b>5. Emotional stability</b>	Self-confident, resilient, well-adjusted
<b>5b. Neuroticism</b>	Anxiety, depression, anger, self-consciousness, easily and frequently upset, distressed, moody, hostile, negative feelings, vulnerable, avoidance temperament, sensitive to threat, emotional instability
<b>References:</b> (Brocklebank <i>et al.</i> , 2015; Johnson, 2014; Carver & Connor-Smith, 2010; Costa <i>et al.</i> , 2002; Dollinger, Leong & Ulicini, 1996; McCrea & Costa Jr., 1997)	



## APPENDIX 13: A DEFINITION OF 'VALUES'



(Adapted from Schwartz & Bilsky, 1987, and the revision to the model Schwartz, 1994).

## APPENDIX 14: SCHWARTZ' VALUE THEORY MOTIVATIONAL DOMAINS

Domain	Description & Values	Universal Needs
<b>Power</b>	Social status, prestige, control, dominance over others & resources, social power, authority	Social interaction Group functioning
<b>Achievement</b>	Personal success by demonstrating competence as defined by society/organisation, successful, capable, ambitious, influential, intelligent, self-respect	Social interaction Group functioning
<b>Hedonism</b>	Pleasure seeking, sensuous gratification for self, enjoyment of life	Biological
<b>Stimulation</b>	Excitement, novelty, challenge, daring, variety in life	Biological
<b>Self-direction</b>	Independent in thought and action, choosing own goals, creating, exploring, curious, freedom	Biological Social interaction
<b>Universalism</b>	Understanding, appreciation, tolerance, protect welfare of all and natural resources, broad-minded, social justice, equality, protect, preserve, conserve	Group functioning Biological
<b>Benevolence</b>	Preservation and enhancing welfare of others in personal social sphere, helpful, honest, forgiving, loyal, responsible, meaning in life	Social interaction Group functioning
<b>Conformity</b>	Restraint of actions, self-disciplined, inclinations and impulses that may upset or harm others and step outside social norms, polite, obedient honour others notably parents/elders	Social interaction Group functioning
<b>Tradition</b>	Respect for tradition, commitment and acceptance of customs and traditional cultural &/or religious ideas, acceptance of personal portion in life	Group functioning
<b>Security</b>	Safety, harmony, stability of society, relationships and self, includes national security, social order, cleanliness	Biological Social interaction Group functioning

(Schwartz, 1994)

# APPENDIX 15: SEVEN DIMENSIONS OF LEARNING POWER (PAIRED OPPOSITES PRESENTED IN ALTERNATING LIGHT AND DARK SHADES)

Dimension	Description
<b>Changing and learning</b>	Personal sense of self as someone who can learn and change for the better over time. Challenges are perceived as opportunities
<b>Stuck and static</b>	Believe learning ability is fixed, so challenge is perceived negatively as revealing personal limitations
<b>Critical curiosity</b>	Personal tendency/motivation to want to understand, get to the heart of the matter, refuse to take things at face value and accept things only when reasoning makes sense.
<b>Passivity</b>	Happy to be 'told' things, passive recipients of knowledge
<b>Meaning making</b>	Individual makes sense of the world by relating to it, linking facts and ideas and seeing connections and patterns
<b>Fragmentation and accumulating data</b>	Learning is approached in separate chunks and performed in order to achieve the criteria for success rather than seeking associations
<b>Creativity</b>	Learning in a variety of ways, using imagination and intuition as well as logic and reasoning; and exploring ideas simply because they may lead to understanding
<b>Rule bound</b>	Preference for clear-cut information and answers, routine problem-solving and proven formulae for success
<b>Learning relationships interdependence</b>	Learning from and with others and therefore being collaborative and a 'team player', but also being able to manage without them when required
<b>Isolation dependence</b>	Tend to be either very reliant on others for guidance or reassurance; or do not engage with others
<b>Strategic awareness</b>	Personal capacity to take responsibility for learning, self-management and have a sense of purpose and direction and planning ability to fulfil intended goals
<b>Robotic</b>	Lack self-awareness and are therefore less effective learners
<b>Resilience</b>	This perseverance or keeping going when the learning journey is challenging. It is self-belief that obstacles can be overcome by combining persistence and clarity of purpose, accepting help when necessary and being creative. Also about controlling feelings of failure or disappointment, accepting they are a part of the learning journey and are temporary
<b>Fragility &amp; Dependence</b>	Lack self-belief, tend to be anxious and negative
References: Williamson <i>et al.</i> , 2011; Deakin Crick & Yu, 2008; Deakin Crick, 2007; Deakin Crick, Broadfoot & Claxton, 2004; Carr & Claxton, 2002.	

## **APPENDIX 16: A REFLECTION ON EMBARKING ON THE PROFESSIONAL DOCTORATE.**

My journey towards embarking on a professional doctorate was not one lightly taken. Indeed, for many years I had resisted even contemplating such level of study as being too late in my career (13 years in clinical practice/clinical management and 15 years in higher education). I was an avid consumer of research and had undertaken several small-scale studies and scholarly activities both in clinical practice and in my role as an educator. Therefore, I felt my engagement with research was appropriate to my academic focus. I had entered higher education to be a teacher, not a researcher; although I saw the importance of research feeding into my teaching, I did not consider it important for me, personally, to be actively engaged in research to fulfil my academic role. However, several years ago I became aware that there was not just one type of level 8 study. I began to explore the differences between traditional PhD and Professional Doctorate study routes. In preliminary discussions with several research colleagues, using them as critical sounding boards, I investigated the professional doctorate route more thoroughly. Although it is acknowledged that there are a variety of PhD models to consider, there are specific differences between the traditional approach and the emerging professional doctorate model, these are summarised in the table below.

**TABLE ILLUSTRATING THE DIFFERENCES BETWEEN TRADITIONAL PHD AND PROFESSIONAL DOCTORATE MODELS (ADAPTED FROM GALE, 2008).**

<b>Traditional PhD Model</b>	<b>Professional Doctorate Model</b>
Pre-service Award	In-service Award
Theoretical research	Applied research
Single discipline	Interdisciplinary
Theoretical Knowledge	Knowledge in context
'Knowledge of...'	'Knowledge for...'
Development of a research career	Development of an academic career
Literature / laboratory based research	Work-based action research

On considering these differences, it became apparent to me that the professional doctorate route was very much more appropriate for me personally and in terms of my research area of interest. The applied and practice focus of the professional doctorate fitted well with me, as a mid-career professional, with roles which tend to cross subject boundaries and practical problems to solve of a contextual nature. The professional doctorate focus was attractive as it acknowledged the value of contextually situated

knowledge on an apparently equal footing with the more abstract knowledge generated within a specific scholarly community. In addition, the professional doctorate appeared to complement both my professional background and my academic career. The physiotherapy profession "... is an autonomous applied science-based healthcare profession using professional knowledge and practical skills together with thinking skills and skills for interaction to work with people to identify and maximise their functional/movement potential" (Northumbria University definition of physiotherapy, based on, CSP, 2013). My naturalisation into this profession, being highly applied and practical in scope meant that when contemplating doctoral studies there was a strong resonance with the professional doctorate route. The concept of 'knowledge for...' rather than 'knowledge of...' was congruent with my past and future personal and professional development plans.

My current role as senior lecturer in teaching-intensive health professional programmes (BSc and MSc physiotherapy education) reinforces the idea that work-based/practice research would be compatible with my role and career focus as an academic. This belief is bolstered when taking into consideration the clear regional focus of my current role, having well-established links with local clinical partners, who are actively engaged in providing our students with placement opportunities, involved in curriculum development and recruitment, as well as being potential employers of our graduates. It therefore seemed logical that my research could and should have a contextual application and meaning beyond my own development. However, at the same time, it offered an opportunity to develop my academic career in the direction I most enjoyed, namely teaching and my academic development. The professional doctorate appeared to give clear recognition of the worth of staff wishing to stay close to teaching or who see their academic career development in terms of a managerial role in learning and teaching (Gale, 2008, p.8).

Personal circumstances were also of key importance to my decision to study at this level. I had reached a point in my career where I needed to reflect on where I saw myself going. Maintaining the status quo had its attractions, I was experienced enough both clinically and educationally to be able to more than adequately fulfil my teaching role and provide my students with a good quality educational experience and prepare them for their future role as physiotherapists. However, the career options for me, continuing in this manner, were obviously reduced and more significantly could lead to personal dissatisfaction, a feeling that I had not reached my full academic potential.

Absolutely key to proceeding with the application to start the professional doctorate was the informal use of several 'critical friends'. These were colleagues who I could discuss my motives for undertaking doctoral study and explore various ideas and methodologies.

They helped reign in the many divergent ideas, give me a sense of direction in terms of topic and methodology; and reinforced my belief in my ability to succeed. The key role of the 'critical friends' was to take time to understand my motivations, the context of my ideas and the potential outcomes that I was working towards. As trusted colleagues, they asked, sometimes, provocative questions, or offered critical judgements; but balanced this with support and encouragement. The process being similar to a 'guided' or 'shared' reflection process, often used in clinical practice. This is where the reviewed individual does not need to respond, or act specifically on the given feedback, but can simply reflect on it and choose to be guided by it, or not (Costa & Kallick, 1993).

## APPENDIX 17: A REFLECTION ON MY DEVELOPMENT AS A QUALITATIVE RESEARCHER

When initially developing the proposal for this research study it became apparent to me that my wider understanding of the philosophy of enquiry or research was narrow. A point noted by Richards and Schwartz (2002, p.136) when they suggest health professionals are generally not trained in the philosophical underpinnings of research. My appreciation of the philosophical debates around 'truth' or 'reality' (ontology) and 'knowledge' and how it may be acquired (epistemology) and how these concepts, or paradigms, may be explored and thus better understood, was based on personal educational and professional exposure (Ritchie *et al.*, 2014, p.24; Creswell & Plano Clark, 2011, p.39).

By-and-large my post-18 education was mostly in preparation to enter and progress in the physiotherapy profession. It is a profession long associated with the natural and medical sciences; and utilises problem solving and reflection as a means of identifying and prioritising clinical problems and best evidence-based solutions to those problems. The requirement to be evidence-based practitioners is an expectation from the professional body, the Chartered Society of Physiotherapy (CSP) and a requirement for continued 'professional registration' via the Health and Care Professions Council (HCPC). Therefore, professionally, I was a consumer of research; and through both embarking on education programmes and in my professional practice, I undertook several, small-scale experimental research projects. Thus my exposure to and understanding of science was significantly influenced, as stated by Kuhn (1981) by the underpinning theories, practices and expectations of my professional education and subsequent professional relationships and practice. Such established beliefs and expectations has informed my professional worldview, but in a cautionary note Kuhn (1981, p.24) warns, "*...though it makes short term success particularly likely [it] also guarantees long-run failures*"; suggesting the resultant relatively narrow understandings may lead to false conclusions or misunderstandings.

That last warning certainly had some resonance for me, as increasingly I was becoming frustrated with the evidence-base for my profession which was often criticised in systematic reviews (seen as the 'gold standard' of evidence in the medical literature) as too small scale, contradictory, and of insufficient quality to adequately answer the questions deemed important to the 'profession'. Although not exclusively so, the dominant paradigm (or theoretical 'world-view' perspective) in 'bio-medical' research is positivism. This has been a dominant way of viewing the 'world' from the ancient Greek philosophers through the enlightenment thinkers Frances Bacon (1561-1626), René Descartes (1596-1650), Isaac Newton (1642-1727) and David Hume (1711-76) who extolled the virtues of objectivity, evidence, direct observation and empiricism

(understanding the world through direct experience). This has continued towards the modern era with Auguste Comte (1798-1857) who is considered instrumental in establishing sociology as an academic discipline, but also in suggesting the social world could be investigated in the same way as the natural world (Blackburn, 2008; Bowling, 2014; Ritchie *et al.*, 2014; Ross, 2012).

The source of my personal dissatisfaction was, and remains, with the ‘reductionism’ of the experimental design, advocated by the positivist paradigm. The approach seeks to explain phenomena “within the lowest level of investigation” by limiting the variables between phenomena being investigated (Bowling, 2014, p. 454). All subjects of interest (participants) are randomly allocated to experimental (experiencing the phenomena being studied) or control groups (not experiencing the phenomena; or experiencing a placebo, from the Latin ‘I shall please’, which is an inert treatment or currently accepted ‘standard’ intervention (Bowling, 2014, p. 242)). Further, in as many respects as possible, the two groups (experimental and control) are similarly matched. There is no allowance for the criteria used in selection and randomisation, or exclusion, varying due to individual and local circumstances (May, 2011, p.9). There is also a requirement to ‘blind’ assessors from the subject (participant) groups and ideally ‘blind’ the subjects from the experimental intervention and the control (intervention or no-intervention) together this is termed ‘double blinding’ and is used to promote objectivity and reduce bias.

My dissatisfaction is not unique; Nick Black (1996) suggested the existence of a misguided notion that experimental methods are ‘gold standard’ and everything can be investigated using a randomised controlled trial (RCT). This view has subsequently led to the denigration of non-experimental observational methods to such an extent that they are less likely to be considered by research funding bodies or for publication; although I note Black was referring to non-experimental quantitative methods not qualitative methods. Black’s (1996) point however, is acknowledged by Johnson & Waterfield (2004) who suggest the distrust of qualitatively generated data is due to a perception that it cannot be valid, or have utility beyond supplementing the findings of quantitative research.

In 2008, the Medical Research Council (MRC) published new guidance on ‘Developing and evaluating complex interventions’ (Craig *et al.* 2008a). This was in response to criticisms of the influential 2000 MRC ‘framework for the development and evaluation of RCT’s for complex interventions to improve health’. The critics complained it was largely based on a linear model utilised to evaluate new drugs; it assumed that conventional clinical research [RCT’s] offered a universal template for all medical/clinical evaluations; and that it largely ignored social, political or geographical contexts in which the various interventions occur. The new guidance states qualitative research can provide both “important insights into the processes of change [and] can be a good way to involve



users” (Craig *et al.* 2008a, p. 15). This contention was supported by Patsopoulos (2011, p. 218) who challenged the value of RCT’s alone, as doubtful in providing translatable data, usable in real-life settings. In their summary of the key issues prompting the revision of the ‘MRC 2000 Guidelines’, Craig and colleagues (2008b & 2013) barely touch on qualitative research and then only in quite disparaging terms, suggesting *researchers* should be cautious of the limitations and interpretations from qualitative research and accept they are “*settling for weaker methods*” (Craig *et al.* 2013, p. 589).

Johnson and Waterfield (2004, p.121) point out that the physiotherapy profession is reluctant to engage with qualitative research implied by a ‘4 per cent inclusion of qualitative research papers in four physiotherapy journals between 1996-2001, compared to 30 per cent in equivalent occupational therapy journals’. They propose this is, at least in part, due to an attempt to gain credibility by emulating the medical profession and its emphasis on presumed superior quantitatively established evidence. The problem for the physiotherapy profession, as I see it, is that patient/therapist interactions are nearly always multifaceted in nature. They are reliant on the development of a rapport between the patient and therapist in a variety of settings from hospitals to outpatient’s clinics and community settings including the patient’s own home. These interactions involve the application of several interventions, including home advice, aimed at eliciting behaviour change to encourage the patient to take personal responsibility for their rehabilitation to address their own clinical problems. Thus the positivist, reductionist stance, as I understand it, fails to provide all the answers to real-world dilemmas, which demand a balanced approach based on the research question and the context in which the enquiry occurs.

My desire to undertake doctoral studies created a number of personal dilemmas. Educationally and professionally, I was immersed in, or socialised towards a natural science/medical research, positivist paradigm; something the philosopher John Dewey referred to as ‘warranted beliefs’ (Morgan, 2014, p.28). Unfortunately, my warranted beliefs about research designs for example, were, to coin a quantitative research term, ‘skewed’. Professionally, clinical reasoning is an exercise in problem solving. This involves the organisation of wide ranging knowledge, including propositional knowledge (‘knowing that’), or the science of the profession; and non-propositional knowledge (‘knowing how’), or the art of the profession. It draws on cognitive skills, such as synthesis and data analysis of existing professional knowledge with new knowledge/data gained from the patient, carers and other members of the multi-disciplinary team. Finally, the metacognitive skills of self-awareness and reflection enable the therapist to draw on previous experiences, similar problems and the positive/negative issues emerging from experiential learning (Higgs *et al.*, 2008, p.249).

The choice of 'professional doctorate' was consciously made with this problem-solving background in mind as it is very much focused on exploring 'collective oppositions', such as: 'pure and applied', 'abstract and concrete', 'knowledge and behaviour' and 'theory-practice' that emerge with the practical problems faced by professionals (Schwandt, 2014). Professional practice problems are often ill defined and poorly structured, meaning end-goals, key resources and emergent constraints are not very clear from the outset; and resolution of the identified problem/s may or may not be possible, or indeed, there may be multiple solutions. The professional doctorate focus has resonance with my own professions expectation of action in response to an identified problem, thus building on my skills of reflection and critical decision-making to reason the best options (Schwandt, 2014). Seale (1999) views social research as a craft skill in which researchers must navigate their way through a mass of conflicting positions; and for me the professional doctorate offers an "on the job", experiential "apprenticeship" in applied social research (Seale, 1999, p. 475).

This concept of the research 'apprenticeship' led me to explore a personally unfamiliar research methodology, qualitative research, and for the first time to explore some of the broader issues of methodology. Initially this was bewildering, a veritable maize of philosophies, concepts and approaches, and each one apparently at odds with the other. From my 'relative novice' perspective statements like 'there is no single accepted way of carrying out qualitative research' (Ritchie *et al*, 2014, p.2) were somewhat disheartening. However, one quote caught my attention and encouraged me that I was in the right direction of travel; that qualitative research is: "*Seeing through the eyes of the people you are studying*" (Bryman, 1988, p. 61, in Holloway, 2005, p.4). This starting point led me to investigate the technical differences between 'exploring meaning' (idealism) and 'describing perspectives' (realism); and between providing an 'explanation' (interpretivism) and 'achieving an understanding' (constructivism) (Ritchie *et al.*, 2014, p. 4; Ross, 2012, p. 86; Holloway, 2005, p.3).

My investigations were to gain a better understanding of qualitative research and identify a methodology that would best fit my aims and provide procedural guidance. What I found was methodology as a theoretical restraint, in which polarised traditions appeared to lead to entrenchment. This, in turn, stifled thinking and learning from different philosophical standpoints; for me the effect was utter confusion. The concept of two realities; one, an 'intransitive' reality independent of human existence, which is the spatio-temporal, natural world that had existence prior to the evolution of humans. The other, a 'transitive' reality that is the ever-changing world of human ideas, relationships and constructions emerging from social and psychological experiences seemed to encompass the philosophical polarity I perceived (Plowright, 2011, p. 178). The debates surrounding

'reality' as either mind-independent (intransitive) or mind-dependent (transitive) illustrates the challenges for 'research apprentices' wishing to study their world; and adding to my growing incomprehension (Plowright, 2011, p.179). For me it raised questions why must reality be either, or, why could it not be both?

To break the confusion and resultant stasis of my early research endeavours, I was guided by my supervisor towards social policy research. What I discovered was a very practical hybrid research approach, broadly embedded in constructivism (transitive reality), and partially related to subtle realism (intransitive reality), but wholly pragmatic. The approach was totally focused on the research question and the requirement to select an approach and methods appropriate to addressing that question, rather than aligning with a particular philosophical stance (Ritchie *et al*, 2014, p. 19). Although usually associated with mixed methods approaches to research, the applied social policy research framework supports qualitative methods as an independent strategy. This is particularly true where the subject matter is ill defined, or not well understood (Ritchie *et al.*, 2014, pp. 37-38). This was personally helpful in the early stages when I was uncertain about whether to undertake purely qualitative or mixed methods research. The attraction was, far from being the "anything goes" approach critics level at applied social policy research and the pragmatism inherently guiding it, it provided the procedural guide I was seeking (Ritchie *et al.*, 2014, p.20). Furthermore, rooted in the ancient Greek word 'pragma' ('a thing done' or 'action') pragmatism implies knowledge is gained from taking appropriate action and learning from the resultant outcomes (Morgan, 2014, p. 7).

The version of pragmatism that captured my imagination evolved from the philosopher John Dewey and his ideas around 'inquiry' (research) as "a guide to living" which transforms everyday problems into reasonably unified assertions, or focused actions (Ormerod, 2006, p. 900). Rather than questioning the nature of truth, the pragmatist focuses on the outcomes of actions, the participants and the researcher's; and rather than considering the individual as an isolated source of beliefs, pragmatism is concerned with shared beliefs, which are socially mediated and contextual (Ormerod, 2006). Therefore, in exploring questions such as 'what difference does it make to act in this way or another way'; the pragmatist seeks to answer it by exploring possible consequences of different lines of action and deciding on a specific way that resolves the initial uncertainty (Morgan, 2014, p. 28). Patsopoulos (2011) suggests pragmatic research maximises heterogeneity by asking real-life questions and measuring a wide variety of outcomes, mostly from a person-centred perspective in real-life settings.

Such an approach, with its applied and practice-based focus on actions, with an expectation of effecting change, complements both the practice focus of the professional doctorate and my own applied problem-solving professional background. There is an

acknowledgement that actions are inextricably linked to situations and contexts in which they happen; are dependent on socially shared beliefs; and are related to their consequences in ways that are open to change. The link with this study is clear, in which I sought to explore students entering a single healthcare profession and follow them on their learning journey through their programme to conclusion.

## **APPENDIX 18: A REFLECTION ON MY LEARNING JOURNEY**

One of the findings of this study was the observation that none of the nine participants, including the eight successfully completing the degree, had totally challenge-free learning journeys. Even Case 3, who experienced a relatively smooth journey, reported irritations and frustrations at times, and towards the end of the journey had a close family member diagnosed with a life threatening condition. They demonstrated the ability to draw on several personal characteristics such as conscientiousness, resilience and reflection, not only to overcome the challenges encountered, but also to learn from them. All the while, cultivating their embryonic understanding of, and attraction to, a physiotherapy identity towards acceptance and adoption of that identity as synonymous with them. It was a revelation to hear that change from physiotherapy being referred to as “they” in the early phase of the study, to the encompassing reference to “we” in the final phase. This was both the affirmation that such professional learning journeys are not just about the acquisition of new knowledge and skills but the attainment of a new identity. This also supported the inclusion of identity theory as the theoretical framework underpinning my research.

For me the learning journey was also littered with challenges that threatened the continuation of the learning journey and therefore demanded the utility of personal characteristics as resources. The first of these challenges was at the embryonic stage of pre-contemplation and overcoming a subconscious belief that people from my background (widening participation) do not undertake doctorates. An informal discussion with a well-respected colleague and experienced researcher ignited the belief I had an idea that was worth developing and I had the ability to see it through. Once started on the doctoral path I discovered areas of knowledge I was only partially aware of, indeed had dismissed as irrelevant to my practice as a physiotherapist, namely philosophy and qualitative research.

This truly was a revelation for me and offered possibilities to address some of the serious misgivings I was having with the physiotherapy evidence-base, which was dominated by quantitative research. Further, accusations that physiotherapy research is often methodologically flawed, lacking careful scrutiny and empiricism, small scale, incomplete and frequently contradictory created a sense of frustration (Carter & Lubinsky, 2016, p. 3; Jones, 2009, p. 23). I felt strongly that the anecdotal evidence that physiotherapy makes a difference to people’s lives demanded supporting evidence that would both stand up to scrutiny whilst reflecting the true nature of physiotherapy practice. Physiotherapy interventions are, by design, reflective of individual’s clinical problems, which are multi-faceted in nature. Therefore, the reductionism of quantitative research is not a true representation of clinical practice and can generally provide only partial answers to clinical efficacy.

I began to view the professional doctorate as an opportunity to investigate an area of my current practice, as an academic and more specifically an Admissions Tutor. However, I also came to view it as a research apprenticeship (Seale, 1999, p. 475), the opportunity to explore and practice research under the supervision and guidance of an experienced researcher. My thought was to explore, what was for me, an unfamiliar methodology, namely qualitative enquiry, and the associated underpinning philosophies. I was professionally orientated towards quantitative research, based on a narrow view of the presumed superiority of quantitatively established evidence. This view, held by the medical profession is shared by the physiotherapy profession as it seeks to emulate and align with medicine (Johnson & Waterfield (2004, p.121). For me, the requirement was to understand qualitative research better, to engage in it, and from this apprenticeship consider how I may contribute to the future physiotherapy evidence-base.

The second challenge occurred towards the end of the first year of the doctorate when my then supervisor announced they were leaving the university and would no longer be involved in my research. This was something of a blow as I had submitted my proposal to the Faculty Ethics Panel. After a three-month delay, caused by the uncertainty of who would be my supervisor, I was granted ethical approval and a new supervisor was agreed. For me there was a great deal of uncertainty and demanded resilience and conscientiousness to manage the situation, adapt my data collection timetable and then begin recruitment and data collection within a time-frame that would allow achievement of the aims of the study. Developing a relationship was a relatively easy process but did lead to a redirection of my original idea, which had been around mixed methods, but on reflection lacked a clear theoretical focus. Working with my new supervisor, I was able to underpin my research focus with identity theory, and was introduced to 'Framework'. This approach to data handling and management, developed in applied social policy research, provided me with a transparent and structured tool to manage the vast amount of data I was obtaining from my interviews with student participants. This was a very steep learning curve, but one that was hugely exciting. My own professional identity was very strong and very much part of who I am as an individual; but I also gained appreciation of my own worldview, pragmatic', and was able to utilise this in understanding my position within the research study. Never having engaged in qualitative research before, I had failed to appreciate the symbiotic relationship between the researcher, the participants and the conduct of the research from inception to completion.

The third challenge has been an ongoing one throughout the research period, namely the requirement to balance the demands of the doctorate with the requirements of a fulltime post and family life. The academic role in health professional education is in itself demanding; requiring teaching, administration, which for me included marketing and

recruitment activity, as well as module leadership. It also required research and scholarship to support teaching, and pastoral support of students. In addition, although my children were older and required less direct caring and nurturing, and with my wife were supportive of me undertaking the doctorate, nevertheless family commitments continued. Life throws up unexpected hurdles to overcome; during the doctorate, I have had to manage the chronic and progressive ill health of two close family members from practical and psychological perspectives. The resultant stresses have contributed to my own health issues. These circumstances enabled me to be non-judgemental about how the participants managed their own learning journeys and indeed, I found I could empathise with all nine, including the participant forced to withdraw from the programme. My interpretations of the personal characteristics illustrated, or not, by the participants, were made, in part, based on shared experiences and empathy with the challenges they faced.

The participant's willingness to take part in the research identified for me a potential professionalism relating to notions of professional society (Figure 1). In this instance, an affinity to physiotherapy community service values, to involving themselves in expanding professional knowledge. This attitude reflected my own attitude to a profession I am intimately bound to and one that is a reflection of me and me of it. Therefore, the aim of gaining better understanding of the characteristics that lead to successful completion of the degree and attainment of the professional identity is of paramount importance. My journey has reflected those of my participants. There have been highs and lows and demands have been placed on my personal resources to cope and manage the challenges encountered. Learning relationships have been important from both a support perspective as well as being part of my apprenticeship. Both supervisors have been sources for debate, and facilitating me to see how I could do things better, or supporting the direction, or approach, I was taking. My colleagues have been sources of active learning with encouragement and general philosophical discussions, as well as providing practical support at times to allow me to have some additional free time to undertake the study, or write up the thesis.

My ability to draw on conscientiousness and resilience, to make sacrifices of personal time and to continue with the study despite health issues (family and own) have been significant in getting to this point. Reflection has been an aspect of my professional life for so long it was challenging to sit quietly through interviews and not shout, "Why can you not see why that did not work out?" or, "you identified a problem, why are you not doing something about it?". For me, most learning occurs because of reflecting on experiences whether that is reading, having a debate/discussion with supervisors or colleagues, or listening to participants talking about their learning journey experiences. The need for me

to make meaning, to understand something in relation to my existing knowledge and to work out its utility to further learning, or current practice, emphasises the role of reflection. However, it also points to the relationship between facets of the characteristics identified by this study. I make meaning by reflecting, but in doing this I also demonstrate my attitude to learning, which has been an ongoing active engagement with education and personal and professional development, and will continue to be so.

Another characteristic identified by this study was caring. I, like my participants, have been motivated, throughout my career, to make a difference to people's lives. The move from clinical practice, although I retain opportunities to undertake clinical activity, into education, has not removed that desire; rather it refocused it towards making a difference to the lives of students. My desire to achieve excellence is in preparing students to be the best they can be. Thus, I fulfil my purpose in recruiting and educating students to excel and provide the highest quality service to address the problems of their service users. Again, the relationship between facets of the identified characteristics is clear. In caring about my students and my profession, I conscientiously strive for excellence, by providing the best service I can and promoting these values to my students. Thus, my colleagues and I are subconsciously engaged in promulgating the characteristics of physiotherapy. This same attitude has been in evidence throughout the conduct of this study. I care about my profession, therefore I value the aims of this research and potential value to it continued development. I care about my students, and therefore about the participants who altruistically gave their time to attend the study interviews. Thus, I strove for quality throughout the study, by ensuring ethical considerations were paramount from inception to write-up. For me the concept of quality research is synonymous with ethical research and I believe this was achieved within the scope of my practice as an apprentice researcher.

This learning journey has certainly been an education. It has taught me much about myself as a learner, researcher, educationalist, physiotherapist and person. Given the challenges met and overcome, the acceptance of my interpretations is important to me. However, more important is the appreciation that they have been made honestly and transparently, and that their value has both contemporary currency, but may also lead to further post-doctoral work of merit.



## APPENDIX 19: DISSEMINATION PLAN

Area of Study	Who	How
Physiotherapy Identity	Physiotherapists physiotherapy students HEE & Equivalents	<p>Publication possibilities – physiotherapy professional literature plus broader Health care professional literature</p> <ul style="list-style-type: none"> <li>• Physiotherapy Journal</li> <li>• Physiotherapy Theory and Practice</li> <li>• Journal of Allied Health</li> <li>• HEE News</li> <li>• Research in Higher education</li> <li>• Health Education Research Theory and Practice</li> <li>• Education for Health</li> </ul> <p>Conference/presentation/poster</p> <ul style="list-style-type: none"> <li>• Physiotherapy UK Conference</li> </ul>
Identity Theory / Values / Personality / DIS model	Social scientists	<p>Publication possibilities:</p> <ul style="list-style-type: none"> <li>• Learning in Health and Social Care</li> <li>• Learning and Individual Differences</li> <li>• Personality and Individual Differences</li> <li>• Educational Research</li> <li>• British Journal of Educational Psychology</li> </ul>
Physiotherapy Recruitment / VBR	Physiotherapy managers / Admissions tutors Other Health & Social Care professions recruiters HEE & Equivalents Prospective students	<p>Publication possibilities – physiotherapy professional literature plus broader Health care professional literature</p> <ul style="list-style-type: none"> <li>• Physiotherapy Journal</li> <li>• Physiotherapy Theory and Practice</li> <li>• Journal of Allied Health</li> <li>• HEE News</li> <li>• Research in Higher education</li> <li>• Health Education Research Theory and Practice</li> <li>• Education for Health</li> </ul> <p>Conference/presentation/poster</p> <ul style="list-style-type: none"> <li>• Physiotherapy UK Conference</li> </ul> <p>Recruitment/Marketing activities</p> <ul style="list-style-type: none"> <li>• Open Days</li> <li>• Careers Presentations</li> </ul>
Methodology: Framework Interviews	Qualitative researchers/students	<ul style="list-style-type: none"> <li>• Qualitative Health Research</li> <li>• Physiotherapy Research International</li> <li>• Quality and Quantity</li> <li>• International Journal of Qualitative Methods</li> </ul>

		<ul style="list-style-type: none"> <li>• Qualitative Inquiry</li> <li>• Studies in Higher Education</li> </ul> <p>Teaching activity</p> <ul style="list-style-type: none"> <li>• BSc Physiotherapy Programme</li> <li>• MSc Programme</li> </ul>
<p>Learning Journey vignettes</p> <ul style="list-style-type: none"> <li>• The mature student</li> <li>• The young student</li> </ul>	Academics / clinical educators	<ul style="list-style-type: none"> <li>• Studies in Higher Education</li> <li>• Learning and Individual Differences</li> </ul>
The importance / role of the clinical educator	Academics / clinical educators	<p>Publication possibilities – physiotherapy professional literature plus broader Health care professional literature</p> <ul style="list-style-type: none"> <li>• Physiotherapy Journal</li> <li>• Physiotherapy Theory and Practice</li> <li>• Journal of Allied Health</li> <li>• Health Education Research Theory and Practice</li> </ul> <p>Conference/presentation/poster Physiotherapy UK Conference</p> <ul style="list-style-type: none"> <li>• Learning and Individual Differences</li> </ul>